

~~SECRET~~

~~U. S. SECRET~~ - SHINGLE

(~~DECLASSIFIED~~ ~~BRITISH~~ ~~MOST~~ ~~SECRET~~)

" S H I N G L E "

~~SECRET~~

~~Equals~~ British MOST SECRET

Incl #5

RECEIVED  
UNCLASSIFIED  
BY AUTHORITY  
OSD Memo of 5/3/79  
McFiler  
on 6/13/84

HEADQUARTERS FIFTH ARMY  
A.P.O. #15, U.S. Army

~~SECRET~~~~Equals British MOST SECRET~~

OUTLINE PLAN  
OPERATION BRIDLE

UNCLASSIFIED

SECTION I  
SITUATION

1. Assumptions.

- a. Fifth Army has advanced to the general line CAPISTANO - PRIVERNO and is prepared for an all-out drive on to the north with COLLI LAZIALI as its principal objective.
- b. Enemy strength and dispositions on the front of Fifth Army are such that the main attack on COLLI LAZIALI will have to start with an amphibious landing outlined below in seven days.

2. Enemy.

See Annex No. I - G-2 Plan.

3. Intelligence.

See Annex No. II - Troop Lists, daily G-3 Report for Order of Battle, Fifth Army and daily G-3 Sitrep for information concerning operations of Eighth Army.

SECTION II  
MISSION

4. Assist the main attack of Fifth Army in the capture of COLLI LAZIALI.

SECTION III  
OPERATIONS

5. General.

- a. D Day: Day on which assaults are launched on beach near ANZIO.
- b. H Hour: Time at which first landing craft touch the beaches.

6. Preparatory Measures - Prior to D Day.

- a. Naval and Air Action. To be undertaken with the object of reducing the naval and air power of the enemy and his other capabilities of interfering with the operation.
- b. Cover Plan. Will issue later.

~~SECRET~~~~Equals British MOST SECRET~~

1  
~~SECRET~~

UNCLASSIFIED

7. Assault.a. Star Assault.

- (1) Commander: Major General \_\_\_\_\_.
- (2) Troops: One Infantry division reinforced. (See Annex II, Troop List)
- (3) Mission.
  - (a) Phase I
    1. To launch assaults on beaches between NETTUNO and LA RANCA.
    2. To establish a beachhead.
    3. Capture by H hour gun batteries capable of seriously interfering with the assault.
  - (b) Phase II
    1. Attack in the direction of COLLI LAZIALI.
- (4) Maintenance.  
Over the beaches until contact is established with Main Fifth Army.
- (5) Transport.  
Shore to shore.
- (6) Support.
  - (a) Navy - By naval gunfire on call from task force commanders.
  - (b) Air
    1. Fighter protection from hostile air interference.
    2. Direct and indirect support of ground operations by:
      - a. Prearranged strategic missions.
      - b. Tactical missions prearranged and on call.
    3. Reconnaissance and photo missions.

b. Sun Assault.

- (1) Commander: Colonel Tucker until contact is gained with Commanding General Star Assault; thereafter Commanding General Star Assault.
- (2) Troops: 504th Parachute Infantry, Reinforced.
- (3) Mission.  
To drop a parachute task force (time of drop later) in rear of beaches to be assaulted; to prevent the enemy from reinforcing troops resisting our landings; to harass the rear of enemy troops resisting our landings; to gain contact with the Star assault D Day.
- (4) Transport.  
By arrangement with Troop Carrier Command.
- (5) Maintenance.  
The Star assault commander is responsible for resupply of the Sun assault.

c. Moon Assault.

- (1) Commander: \_\_\_\_\_
- (2) Troops.  
Naval force provided by Commander Task Force 81.
- (3) Mission.  
To create a diversion by a feint against the beaches in the vicinity of OSTIA LIDO with a view to diverting the maximum of hostile forces to that sector and away from the main assaults.

COPY NO.

27

UNCLASSIFIED

~~SECRET~~

~~SECRET~~

UNCLASSIFIED

SECTION IV  
ADMINISTRATION

~~Equals British MOST SECRET~~

8. See Annex III - G-4 Plan.

SECTION V  
COMMUNICATION

9. See Annex IV - Signal Communication Plan.

CLARK  
Commanding

OFFICIAL:

*Brain*  
BRANN  
G-3

DISTRIBUTION:

"Special" (25 Copies)

~~SECRET~~

~~Equals British MOST SECRET~~

3

~~SECRET~~

UNCLASSIFIED



~~SECRET~~

UNCLASSIFIED

~~SECRET~~ ~~SECRET~~

U. S. ~~SECRET~~ SHINGLE EQUALS BRITISH MOST SECRET

HEADQUARTERS FIFTH ARMY  
A. P. O. #464, U. S. Army

SECRET  
By Auth of: CG,  
Fifth Army  
Intls: *AP/*  
Date 1/12/44  
12 January 1944

SUBJECT: Outline Plan, Operation SHINGLE.

TO: All concerned.

1. The following precautions will be taken to safeguard Outline Plan, Operation SHINGLE.

a. On no account will the Outline Plan be exposed to capture by the enemy.

b. Each Outline Plan will be issued only to a named individual and a receipt obtained.

CLARK  
Commanding

OFFICIAL:

*Brann*  
BRANN  
A C of S, G-3

DISTRIBUTION:

Same as for Outline Plan.

UNCLASSIFIED

SUBJECT: Security of Operation SHINGLE

H.Q. 15 Army Group,  
C.M.F.

~~TOP SECRET - SECURITY INFORMATION~~

15AG/1462/7/GS(1b).

31 December, 1943

TO: Fifth Army. Copy Nos. 1 - 2

Copy No. 105

1. Introduction.

The ordinary security precautions which are necessary in the planning of a Combined Operation should by now be well known and are not set out in detail in these instructions, which deal only with certain aspects of particular importance or specific application:

2. General.

It will not be possible to conceal from the enemy the fact that an amphibious operations is to be mounted from the Port of NAPLES, but the vital details of this operation can and must be concealed, viz the objective, the date, the strength and order of battle of the force, and the tactical methods to be employed.

3. Knowledge of the Plan

It is not proposed to maintain at this H.Q. a list of officers having knowledge of the plan, but the following essential principle will be strictly adhered to by all concerned throughout: INFORMATION CONCERNING THE PLANS WILL ONLY BE DIVULGED TO, OR DISCUSSED WITH, THOSE PERSONS WHO REQUIRE SUCH KNOWLEDGE TO ENABLE THEM PROPERLY TO CARRY OUT THEIR DUTIES, AND THEN ONLY AT SUCH TIME AND IN SUCH DETAIL AS MAY BE NECESSARY FOR THIS PURPOSE.

All those informed of details of the real plan should be informed at the same time of equivalent details of the cover plan.

4. Documents and Messages.

Documents and messages which contain any of the vital details referred to in para 2 above will be treated as follows;

Such documents and their inner envelope will be marked SHINGLE Br. MOST SECRET Equals US. SECRET.

Such messages, if U.S. procedure is followed, will be classified as SECRET and the word SHINGLE placed at the beginning of the text: if British procedure is followed the words MOST SECRET SHINGLE will be placed at the beginning of the text.

It will be laid down by each HQ and/or Branch concerned which Officers and Clerks may open and handle documents and messages so marked.

The distribution of such messages within HQ's must be restricted to a minimum.

5. Geographical Code Names.

The possible adoption of geographical code names for towns and features in the area of the objective is being considered, and separate instructions on this point will be issued shortly.

.....6.

#### 6. Preparations for Mounting

All preparations for mounting the operation must, as far as possible, be planned and implemented in such a way that its vital details are not revealed to, and cannot be deduced by, either the enemy, the civil population or our own forces apart from those whose duties require such knowledge. These preparations should conform, where possible, to the cover plan, or at least they should be made to appear consistent with explanations other than the real one. Where this is not possible, the matter should be referred to the Intelligence Staff before action is taken, in order that special measures may be devised to counter or minimise the danger involved. Any such preparations of a major nature, whose compromising effects cannot be countered locally, should be referred to this H.Q. As a general principle all such compromising preparations should be delayed until the latest possible moment.

#### 7. Assembly Areas.

On the arrival of forces in their final assembly areas prior to embarkation, these areas must be isolated in such a way that there is no further contact between personnel of these forces and the civil population or neighbouring troops not involved in the operation.

This "sealing-up" of Assembly Areas must be treated as one of the most vital security safeguards, and every effort must be made to ensure its effective implementation. To this end, formations will arrange for a security reconnaissance of their Assembly Areas to be carried out before the arrival of the troops, in order that the necessary steps may be taken to put the above into effect at the appropriate time without delay.

#### 8. Briefing.

All briefing will conform to the basic security principle set out in par. 3 above.

It follows, therefore, that general briefing must be carried out at each level as late as possible consistent with operational requirements. The detailed briefing (i.e. disclosure of objective and departure date) of the troops as a whole will be delayed until after their arrival in assembly areas.

#### 9. Issue of Maps.

The bulk issue of maps of the objective will conform to the policy governing briefing: they will be distributed down to each level at equivalent stages and with thorough security precautions.

The general distribution of operational maps must only be made in an area under rigid security control, i.e. in Assembly Areas or after embarkation. Sealed rolls of maps may be distributed to formations and units shortly before briefing, but these rolls must not be opened or re-arranged until briefing is about to take place.

Planning maps may be issued at any time, but the scale of issue must be as low as possible, and maps of the cover objective should be issued at the same time.

#### 10. Embarkation.

NAPLES and satellite ports are covered by Port Security detachments of CIC, who are responsible for supervising and advising on local security measures in connection with the embarkation. Formation Security/CIC Officers should contact (through G-2, P.B.S.) the appropriate Port Security Officer before the date of embarkation, and discuss with him Security requirements.

.....11)

11. Documents.

No documents relating to the operation must be taken ashore at the objective except those which are absolutely essential to the efficient conduct of the operation. Arrangements will be made for the destruction of all non-essential documents either before embarkation or on board the ships and craft. It is of the utmost importance that any documents liable to capture by the enemy are reduced to a minimum both as regards number, size and scope, and all possible steps must be taken to this end.

12. Reports of possible leakages.

Any breach of security which might involve leakage to the enemy regarding details of the operation will be reported immediately to this Headquarters. The vital bearing which security has on this particular operation can NOT be too strongly emphasized.

Signed/ T. S. Airey  
For / Major General,  
Chief of General Staff,  
15 Army Group.

Copy to:-

A.F.H.Q.	Copy No. 3
AFHQ Adv Adm Ech.	" " 4
P.B.S.	" " 5
T.A.F.	" " 6
Tac Hq "A" Force	" " 7
15 Army Group PA to CGS	" " 8
G (Ops).	" " 9
G (SD).	" " 10
B.R.A.	" " 11
C.E.	" " 12
C.S.O.	" " 13
Adminrep.	" " 14
R.N.L.O.	" " 15
File	" " 16
Spares	" " 17 - 20

~~SECRET~~

UNCLASSIFIED

~~Equals British MOST SECRET~~

COPY NO. 47

U. S. SECRET SHINGLE  
(EQUALS BRITISH MOST SECRET)

HEADQUARTERS FIFTH ARMY  
A. P. O. #464, U. S. Army

12 January 1944

OPERATION PLAN

"SHINGLE"

This Operations Plan consists of the Outline Plan Operation SHINGLE (Basic Document) with Operations Overlay No. 1 and the following Annexes:

Annex No. 1 - G-2 (Intelligence) Plan

Annex No. 2 - Troop List

Annex No. 3 - G-4 (Supply) Plan

Annex No. 4 - Signal Communication

Annex No. 5 - G-1 Plan

Annex No. 6 - Craft Allocation and Weights and Craft Limitations

Annex No. 7 - Air Plan

U. S. SECRET  
EQUALS BRITISH MOST SECRET

UNCLASSIFIED

~~SECRET~~

~~Equals British MOST SECRET~~

UNCLASSIFIED

~~SECRET - SHINGLE (EQUALLY DISTRIBUTED MOST SECRET)~~

DISTRIBUTION OUTLINE

PLAN OPERATION SHINGLE

<u>DISTRIBUTION</u>	<u>COPIES</u>
CG	1
AG File	2
15th Army Gp	3 - 5
C-in-C AFHQ	6 - 8
CG, NATOUSA	9 - 10
CG, SOS, NATOUSA	11
CG, VI Corps	12
AFHQ, Adv Adm Echelon	13
CG, PBS	14
CG, Troop Carrier Command	15
CG, XII ASC	16
C-in-C, Med	17 - 18
COMNAVNAV	19
Com 8th Phib	20
SOS Force "P"	21
FOWIT	22
AOC Coastal Command (NAPLES)	23
Air C-in-C, Med	24

UNCLASSIFIED

~~SECRET - SHINGLE (EQUALLY DISTRIBUTED MOST SECRET)~~

UNCLASSIFIED

~~U. S. SECRET~~  
~~(UNCLASSIFIED - EXCEPT WHERE SHOWN OTHERWISE)~~

- (3) Mission: To create a diversion by a feint and bombardment against the beaches in the vicinity of CIVITAVECCHIA (F1790) with a view to diverting the maximum of hostile forces to that sector and away from the main assaults.

SECTION IV

ADMINISTRATION

See Annex III - G-4 Plan

SECTION V

See Annex IV - Signal Communication Plan.

CLARK  
Commanding

OFFICIAL:

*Brann*  
BRANN  
G-3

UNCLASSIFIED

~~U. S. SECRET~~  
~~(UNCLASSIFIED - EXCEPT WHERE SHOWN OTHERWISE)~~

UNCLASSIFIED

COPY NO. 47

~~SECRET~~

~~Equals British MOST SECRET~~

~~U. S. SECRET SHINGLE~~

~~(EQUALS BRITISH MOST SECRET)~~

HEADQUARTERS FIFTH ARMY  
A. P. O. #464, U. S. Army

12 January 1944

OUTLINE PLAN

OPERATION SHINGLE

SECTION I

SITUATION

1. INFORMATION:

a. Enemy - See Annex No. 1 - G-2 Plan.

b. Friendly forces - See Annex No. 2 - Troop List, Daily G-3 Report for Order of Battle, Fifth Army, and Daily G-3 Situation Report for information concerning operations of Eighth Army.

SECTION II

MISSION

2. a. To seize and secure a beachhead in the vicinity of ANZIO (F8517).

b. Advance on COLLI LAZIALI (F9557).

SECTION III

OPERATIONS

3. a. D Day - Day on which assaults are launched on beaches between NETTUNO - LA BIANCA (F9513) and north of TOR CALDARA (F8221).

b. H Hour - Time at which first landing craft of MAIN Assaults touch the beaches.

4. PREPARATORY MEASURES PRIOR TO D DAY.

a. Naval and Air Action - To be undertaken with the object of reducing the naval and air power of the enemy and his other capabilities of interfering with the operation.

b. Cover Plan - To be furnished by 15th Army Group.

5. ASSAULTS

a. STAR Assault.

(1) Commander: Major General John P. Lucas, VI Corps.

(2) Troops: Hq, VI Corps  
3rd Inf Div (US)  
1 Inf Div (Br)  
Ranger Force  
509th Prcbt Bn (Sep)  
Supporting Troops (See Annex #2 - Troop List)

(3) Mission:

(a) Phase I

1. By first light D Day to capture and/or reduce enemy gun batteries capable of seriously interfering with the assault on the beaches.

UNCLASSIFIED

~~SECRET~~

~~U. S. SECRET SHINGLE (EQUALS BRITISH MOST SECRET)~~  
~~Equals British MOST SECRET~~



2. To launch assaults on the beaches North and Southeast of ANZIO and establish a beachhead. (See Operations Overlay #1 to accompany Outline Plan Operation SHINGLE, Headquarters Fifth Army, dated 12 January 1944).

(b) Phase II

1. To attack in the direction COLLI LAZIALI.

(4) Maintenance: Over the beaches and through the Port of ANZIO until contact is established with elements of Fifth Army advancing by land.

(5) Transport: Shore to Shore.

(6) Support:

(a) Navy - Commander - Rear Admiral F. W. Lowry, Commander Task Force 81 (to be known as Amphibious Task Force when Operation SHINGLE is launched) will support Operation SHINGLE by naval gunfire on call from Task Force Commander.

(b) Air - XII Air Support Command - Commander - Major General E. G. House - will support Operation SHINGLE by:

1. Fighter protection from hostile air interference.
2. Direct and indirect support of ground operations by:
  - i. Prearranged strategic missions.
  - ii. Prearranged and on call tactical missions.

(c) Reconnaissance and photographic missions.

b. SUN Assault.

(1) Commander: Colonel R. H. Tucker until contact gained with Commanding General STAR Assault; thereafter, Commanding General STAR Assault.

(2) Troops: 504th Parachute Infantry Regiment, Reinforced.

(3) Mission: To drop a parachute task force H - 60 minutes in rear of beaches to be assaulted. (See Operations Overlay #1 to accompany Outline Plan Operation SHINGLE, Headquarters Fifth Army, dated 12 January 1944) to:

(a) Prevent the enemy from reinforcing troops resisting our landing.

(b) Harass the rear of enemy troops resisting our landings.

(c) Gain contact with the STAR Assault D Day.

(4) Transport: Troop Carrier Command.

(5) Maintenance:

(a) Initially by air.

(b) The STAR Assault Commander is responsible for the resupply of the SUN Assault.

c. MOON Assault.

(1) Commander: Comdr J. Terry, R. N.

(2) Force: Naval force provided by Commander Task Force 81.

UNCLASSIFIED

- (3) Mission: To create a diversion by a feint and bombardment against the beaches in the vicinity of CIVITAVECCHIA (F1790) with a view to diverting the maximum of hostile forces to that sector and away from the main assaults.

SECTION IV

ADMINISTRATION

See Annex III - G-4 Plan

SECTION V

See Annex IV - Signal Communication Plan.

CLARK  
Commanding

OFFICIAL:

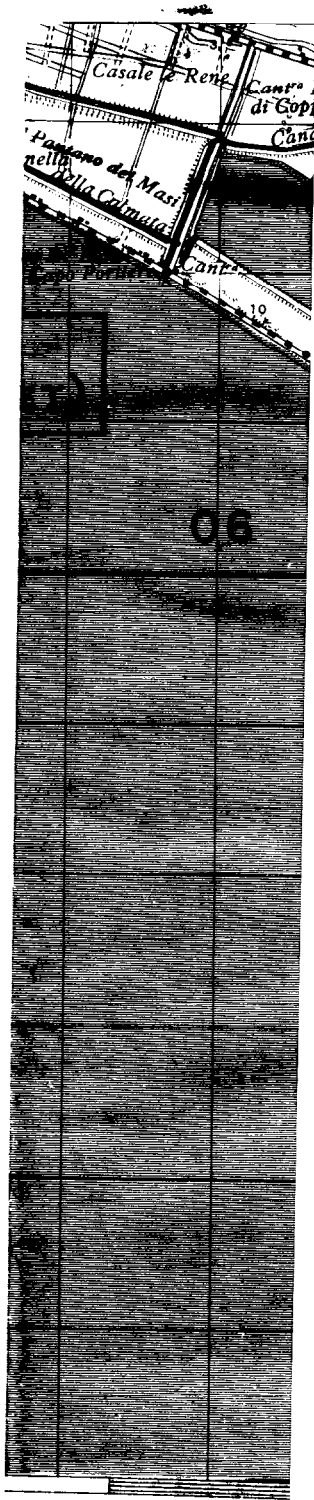
*Brann*  
BRANN  
G-3

~~U. S. SECRETARY OF DEFENSE~~  
~~(FOUO) (REF ID: A66666)~~

UNCLASSIFIED

MAP # 1

NOT DIGITIZED  
—



MAP #2

NOT DIGITIZED

05 06

4 Miles

6 Kilometres

Ove

UNCLASSIFIED

~~U. S. SECRET~~  
~~Equal to British MOST SECRET~~

HEADQUARTERS FIFTH ARMY  
A. P. O. #464, U. S. Army

~~U. S. SECRET~~  
Auth: CG Fifth Army  
Initials: *SLK*  
Date: 28 Nov. 1943

COPY NO. 82

G-2 PLAN

Annex #1 to Outline Plan

SHINGLE

INDEX

<u>PARAGRAPH</u>	<u>SUBJECT</u>	<u>PAGE</u>
1	SUMMARY OF ENEMY SITUATION	1
2	ESSENTIAL ELEMENTS OF INFORMATION	1
3	RECONNAISSANCE AND OBSERVATION MISSIONS	2
4	INTERROGATION OF PRISONERS OF WAR AND EXAMINATION OF DOCUMENTS AND MATERIAL	3
5	MAPS, PHOTOGRAPHS, AND POSAICS	3
6	COUNTERINTELLIGENCE	4
7	CODE NAMES	5
8	PASSWORDS	5
9	REPORTS	5

G-2 ESTIMATE

Appendix No. 1 to Annex No. 1 to

Outline Plan SHINGLE

INDEX

<u>PARAGRAPH</u>	<u>SUBJECT</u>	<u>PAGE</u>
1	MISSION	1
2	SUMMARY OF ENEMY SITUATION	1
3	TERRAIN	14
4	WEATHER	18
5	ENEMY CAPABILITIES	21

INDEX TO INCLOSURES TO

APPENDIX 1

Incl. No. 1 ENEMY DEFENSE OVERLAY  
Incl. No. 2 MEDICAL AND SANITARY DATA ON ROME SOUTH AREA

CODE NAMES

APPENDIX NO. 2 to ANNEX NO. 1 to

OUTLINE PLAN, SHINGLE

~~U. S. SECRET~~  
~~Equal to British MOST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~SECRET~~  
~~Equal to SECRET~~

HEADQUARTERS FIFTH ARMY  
A. P. O. #464, U. S. Army

.....  
: ~~SECRET~~ :  
:Auth: CG Fifth Army :  
:Initials: *MF* :  
:Date: 20 January 1944 :  
:.....

CHANCE NO. 3 to G-2 PLAN "SHINGLE"

COPY NO. B47

20 January 1944

The G-2 Plan, Annex No. 1 to Outline Plan SHINGLE, dated 28 November 1943, is supplemented with the following instructions:

The VI Corps will stock a map depot with maps of available scales to include the area covered by maps as listed below:

GSGS 4164	1:100,000
Sheet No. 135	Sheet No. 142
136	143
137	144
138	145

Maps to be moved on the first and second follow-up convoys, 1/2 on each, in quantities sufficient to map four divisions.

By Command of Lieutenant General CLARK:

A. M. GRUENTHER  
Major General, G. S. C.,  
Chief of Staff.

OFFICIAL:

*Edwin B. Howard*  
EDWIN B. HOWARD  
Colonel, G.S.C.,  
A.C. of S., G-2

~~SECRET~~  
~~Equal to SECRET~~  
-1-

UNCLASSIFIED

111-21-15

UNCLASSIFIED

~~U.S. SECRET~~  
(~~Equal British MOST SECRET~~)

HEADQUARTERS FIFTH ARMY  
A.P.O. #464 U. S. Army

.....  
: ~~SECRET~~ :  
: Auth: CG Fifth Army :  
: Initials: *FAK* :  
: Date: 11 Jan 1944 :  
:.....

COPY NO. 82

CHANGE NO. 2 to G-2 PLAN "SHINGLE"

11 January 1944

The G-2 Plan, Annex No. 1 to Outline Plan SHINGLE, dated 28 November 1943, is supplemented with the following instructions:

1. Tactical reconnaissance and photo reconnaissance information will be broadcast in accordance with directives contained in current Fifth Army S.O.I.
2. Maps:
  - a. Additional sheets of GSGS 4228 (1/25,000) will be made available (for limited distrubition) as follows: (blowups)

158 I, NW  
158 I, NE  
158 IV, SW  
158 IV, NW  
158 IV, NE

By command of Lieutenant General CLARK:

ALFRED M. GRUENTHER,  
Major General, G.S.C.,  
Chief of Staff.

OFFICIAL:

*Edwin B. Howard*

EDWIN B. HOWARD,  
Colonel, G.S.C.,  
A.C. of S., G-2.

~~U.S. SECRET~~  
(~~Equal British MOST SECRET~~)

- 1 -

UNCLASSIFIED

UNCLASSIFIED

~~U. S. SECRET~~  
~~Excluded British Most Secret~~

HEADQUARTERS FIFTH ARMY  
A. P. O. #464, U. S. Army

.....  
: ~~SECRET~~ :  
:Auth: CG Fifth Army :  
:Initials: *W* :  
:Date: 5 January 1944 :  
:.....:

CHANGE NO. 1 TO G-2 PLAN "SHINGLE"

COPY NO. 82

The G-2 Plan, Annex No. 1 to Outline Plan SHINGLE, dated 28 November 1943, is supplemented with the following instructions:

1. PUBLIC RELATIONS

a. Assignment of Public Relations Personnel and Transport

(1) Headquarters VI Corps -- D-Day:

<u>OFFICERS &amp; CORRESPONDENTS</u>	<u>ENLISTED MEN</u>	<u>VEHICLES</u>
2 U. S. PRO's	5 drivers	4 trucks, 4 x 4
1 British Correspondent	4 Copy Crew	1 truck, 3/4 ton
1 U. S. Correspondent		WC
1 French Correspondent		

(2) 3rd Division - D-Day:

<u>OFFICERS &amp; CORRESPONDENTS</u>	<u>ENLISTED MEN</u>	<u>VEHICLES</u>
2 U. S. PRO's	4 drivers	3 trucks, 4 x 4
3 U. S. Correspondents	2 dispatch riders	2 motorcycles
1 Stars & Stripes Correspondent	2 Utility	1 DUKW (for radio)
1 Yank Correspondent	4 Copy Crew	
2 U. S. Still Photographers	4 Radio Crew	
1 U. S. Newsreel "		
2 Field Press Censors		

(3) 1st Division -- D-Day:

<u>OFFICERS &amp; CORRESPONDENTS</u>	<u>ENLISTED MEN</u>	<u>VEHICLES</u>
2 British PRO's	4 Drivers	3 motor cars
6 British Correspondents	1 Dispatch Rider	1 motorcycle
	2 Utility	1 truck, 15-cwt.

(4) Rangers -- D-Day:

<u>OFFICERS &amp; CORRESPONDENTS</u>	<u>ENLISTED MEN</u>	<u>VEHICLES</u>
1 U. S. Correspondent	None	None
1 U. S. Still Photographer		
1 U. S. Newsreel "		
1 Stars & Stripes Correspondent		

~~U. S. SECRET~~  
~~Excluded British Most Secret~~

-1-

UNCLASSIFIED



UNCLASSIFIED

~~U. S. SECRET~~  
~~Equal to British MOST SECRET~~

(5) Paratroopers

<u>OFFICERS &amp; CORRESPONDENTS</u>	<u>ENLISTED MEN</u>	<u>VEHICLES</u>
1 Correspondent (Volunteer)	None	None
1 Still Photographer (Volunteer)		

(6) Troop Carrier Command

<u>OFFICERS &amp; CORRESPONDENTS</u>	<u>ENLISTED MEN</u>	<u>VEHICLES</u>
1 U. S. Correspondent	None	None
1 British Correspondent		
1 Stars & Stripes Correspondent		

(7) Recapitulation (Aggregate):

<u>OFFICERS &amp; CORRESPONDENTS</u>	<u>ENLISTED MEN</u>	<u>VEHICLES</u>
34	32	16

b. Increase in Number of Correspondents:

- (1) Additional correspondents should be authorized to be sent to the operational area in follow-up convoys, under arrangements to be made through Assistant Chief of Staff, G-2, VI Corps.

c. Communications:

- (1) Tactical Signal transmission facilities should be available for dispatch of press copy only when specifically authorized by the Signal officers concerned.
- (2) All scheduled courier services should be available for dispatch of press copy, films, recordings, etc.
- (3) Press material for dispatch by the channels mentioned in subparagraph (1) and (2) should be properly addressed and delivered to message centers by the Public Relations Officer, VI Corps, his authorized representatives, officers or enlisted men.
- (4) The Signal Officer, Fifth Army, plans to provide a 299 radio transmitter for dispatch of press copy. This transmitter, mounted in a DUKW, should go ashore on D-Day with 3rd Division.

d. Pooling

- (1) All news copy, radio material and photographs will be pooled for an indefinite period. The Public Relations Officer, Fifth Army, may at any time revoke pooling in whole or in part.

~~U. S. SECRET~~  
~~Equal to British MOST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

e. Censorship

- (1) No press copy may be sent by electrical transmission without prior censorship. It will then be transmitted in clear.
- (2) Field press censors will be assigned to censor press copy before its transmission by electrical means.
- (3) Copy may be sent by sea, air or road from the operational area to designated bases in rear without prior censorship.

f. Control of Correspondents

- (1) Correspondents assigned to participate in the operation should come under the control of the Assistant Chief of Staff, G-2, VI Corps. Public Relations personnel from Fifth Army should be attached to VI Corps for the operation.

g. Accommodations

- (1) Public Relations personnel and correspondents should be authorized to billet and mess with the units to which they are attached for the operations.

h. Transportation

- (1) Correspondents should be transported, whenever not incompatible with military operations, in vehicles of organizations to which they are attached.

i. Movement of Correspondents

- (1) Correspondents should be authorized to cover stories within the entire area of the Corps. Unit Commanders should be asked to give all possible assistance to correspondents to facilitate their coverage of stories.

j. Direct Communication

- (1) Direct communication should be authorized between public relations officers.

By command of Lieutenant General CLARK:

ALFRED M. GRUENTHER,  
Major General, G.S.C.,  
Chief of Staff.

OFFICIAL:

*Edwin B. Howard*  
EDWIN B. HOWARD  
Colonel, G.S.C.,  
A.C. of S., G-2

UNCLASSIFIED

UNCLASSIFIED

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

INTELLIGENCE ANNEX

G-2 PLAN

HQ FIFTH ARMY  
APO 464, U. S. Army  
28 November 1943

Annex No. 1

to

Outline Plan, SHINGLE

Maps: GSCS 2758, GSGS 4072, GSGS 4230, GSGS 4164, GSGS 4229, GSGS 4228, AMSM 592,  
Town Plan ANZIO - NETTUNO, Photo Mosaics.

1. SUMMARY OF ENEMY SITUATION.

See G-2 Estimate, 22 November 1943, Appendix No. 1 to Annex No. 1

2. ESSENTIAL ELEMENTS OF INFORMATION.

- a. Will the enemy reinforce his air force in the area; if so, when, with what numbers and types of planes, and what airfields will be used?
- b. Will the enemy reinforce his ground forces in the area; if so, when, with what units and where will they be located? What methods and routes will be used for transporting troops?
- c. Will enemy naval elements oppose an amphibious operation in the area? If so, when, where, and with what forces?
- d. Will the enemy resist landing at the beaches? If so, at what beaches, and with what forces?
- e. To what extent will sea mines, land mines, field fortifications and defensive works be used in connection with the defense of the beaches and inland. What types of defensive works will be used and where will they be located?
- f. Where and how will the main reserves, if any, be disposed? What will be their strength and composition?
- g. Will the enemy counterattack with his main reserves? If so, when, where, and in what direction, and with what force?
- h. Will the enemy organize a passive defense? If so, where, when, and what will be the location of the flanks? What will be the composition of the defending force?
- i. To what extent, where, and when will important demolitions be executed?
- j. What will be the status of supply of the enemy?
- k. Will the enemy use gas? If so, where and to what extent?
- l. What weather conditions will prevail from D minus 1 to D plus 7?
- m. To what extent will the enemy air force oppose the landing at the beaches and inland?

UNCLASSIFIED

~~SECRET~~  
~~EXCLUDED FROM MOST SECRET~~

UNCLASSIFIED

3. RECONNAISSANCE AND OBSERVATION MISSIONS.

a. Aerial Reconnaissance.

- (1) Aerial reconnaissance, both visual and photographic, will be the responsibility of the A. C. of S., G-2, Fifth Army.
- (2) Aerial reconnaissance missions for Operation SHINGLE will be assigned by the A. C. of S., G-2, Fifth Army, who will receive requests for missions from the Commanding General, SHINGLE Force.
- (3) Distribution of photographic and visual aerial reconnaissance information will be by broadcast, augmented by delivery of aerial photographs by dropping from air courier, if practicable.

b. SHINGLE Force.

(1) Report as soon as determined:

- (a) Type of resistance encountered at beaches.
- (b) Time, strength, composition, location of forces encountered at beaches.
- (c) Identifications.
- (d) Time, strength, location, extent and results of enemy aerial attack.
- (e) Location, extent and time of major demolitions executed by the enemy on installations such as public utilities, bridges, and ports.
- (f) Strength, composition, disposition, direction of movement, location and time observed of main reserves.
- (g) Evidence of chemical warfare.
- (h) Location, time of observation, disposition and extent of preparations of defensive works.
- (i) Main lines of contact giving location and time determined.
- (j) Location, strength, and time of observation of airborne or paratroop attack.
- (k) Attitude of civil population, including sabotage or fifth column activity.
- (l) Location, direction of movement, and time of observation of important movements of forces.
- (m) Changes of attitude of enemy.
- (n) Information concerning preparations for counter-offensive, delaying action, or guerrilla warfare.
- (o) Intelligence concerning status of supply of enemy.
- (p) Important changes in weather conditions.

c. Signal Intelligence: No change

~~SECRET~~  
~~EXCLUDED FROM MOST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~U. S. Army Engineer~~  
~~Engineer~~

4. INTERROGATION OF PRISONERS OF WAR AND EXAMINATION OF DOCUMENTS AND MATERIAL.

No Change.

5. MAPS, PHOTOGRAPHS AND MOSAICS.

a. Map Coverage:

- |     |   |             |
|-----|---|-------------|
| (1) | GSGS 2758, ROMA   | 1/1,000,000 |
| (2) | GSGS 4072, ROMA   | 1/500,000   |
| (3) | GSGS 4230, Sheets, 27, 28, 34   | 1/250,000   |
| (4) | GSGS 4164, Sheets, 149, 150, 151<br>158, 159, 170   | 1/100,000   |
| (5) | GSGS 4229, Sheets, 149-I-II-IV<br>150-I-II-III-IV<br>151-III-IV<br>158-I-II-III-IV<br>159-III-IV<br>170-IV  | 1/50,000    |
| (6) | GSGS 4228, Sheets, 149-II-NE, SE, SW, NW<br>150-(I-NE, SE, SW, NW<br>(II-NE, SE, SW, NW<br>(III-NE, SE, SW, NW<br>(IV-NE, SE, SW, NW<br>158-(I-SE, SW<br>(II-NE, NW, SE<br>(III-NE<br>(IV-SE<br>159-III, NE, SE, SW, NW | 1/25,000    |
| (7) | AMSM 592, Road Map<br>Sheet No. 17  | 1/200,000   |
| (8) | Town Plan, ANZIO-NETTUNO (Photo Map)  | 1/7,500     |
| (9) | GSGS 4229, Enemy Defense Overlay<br>Sheets 149-II, 158-II, III, IV<br>(Subject to Change)   |             |

b. Map Issue:

- (1) The initial issue of maps will be furnished by the Army Engineer. They will be supplied in scaled rolls of 50 each to the engineer (or S-2) of each assault force, who will be responsible for checking the issue as to scales and quantities and for the distribution of the maps to all units (assigned or attached) of the force. Security regulations will be delivered with the maps.
- (2) Initial issue of maps will be made at the scale prescribed in paragraph 42, change 1 of FM 30-20, dated 6 January 1941, and will be automatic. A 25% reserve will be furnished the Division Engineer to take care of possible map losses during the operation. Subsequent to D plus 7, map supply will be by requisition to the Army Engineer through channels.

~~U. S. Army Engineer~~  
~~Engineer~~

UNCLASSIFIED

~~SECRET~~  
~~Equals~~

c. Photographs and Mosaics: Aerial photographs of the coastal area, both verticals and obliques, will be available to planning staffs in limited quantities. 1/10,000 annotated, uncontrolled mosaics of the coastal area will also be made available to planning staffs.

d. Safeguarding of Maps: Maps will be carefully safeguarded so as not to disclose military information to the enemy.

e. Captured Maps: Captured maps will not be used except for intelligence purposes or in case of urgent necessity. When found in bulk a report on types and quantities, accompanied by five (5) sample copies, will be forwarded through channels to the A. C. of S., G-2, Fifth Army. Maps captured in very small quantities or as individual sheets, after intelligence examination by lower headquarters will be forwarded through channels to the A. C. of S., G-2, Fifth Army.

## 6. COUNTERINTELLIGENCE.

### a. Policy.

No change.

b. Reports: The semi-monthly general security report called for in paragraphs 9 (b), letter 15 AG/1400/2/G(Ib), 21 August 1943, subject: "Directive for COUNTERINTELLIGENCE in WINDSOCK", will be rendered as of the 10th and 25th of each month so as to reach this headquarters, circumstances permitting, not later than the 13th and 28th of the month.

### c. Public Relations.

#### (1) Selection of Correspondents:

(a) The following forces should be covered by correspondents accredited to Fifth Army:

- (1) STAR Force
- (2) Rangers
- (3) SUN Force
- (4) Troop Carrier Command

(b) It is proposed that correspondents shall be assigned as follows:

- (1) STAR Force: Five (5) correspondents, four (4) photographers, six (6) Public Relations Personnel, and one (1) field press censor. One (1) U. S. correspondent shall be assigned to each RCT. In addition, there shall be one (1) British correspondent and one (1) Stars and Stripes correspondent. Correspondents shall be chosen by lot from the total number of correspondents assigned to Fifth Army. One (1) U. S. still photographer and one (1) U. S. newsreel photographer shall be assigned to each assault RCT. One (1) field press censor shall accompany the Division. At least two (2) Public Relations Officers and four (4) enlisted men will be required.

~~SECRET~~  
~~Equals~~

~~SECRET~~

- (2) Transportation:

- (3) Communications:

- (4) Pooling:

7. CODE NAMES. See Appendix No. 2 to Annex No. 1 to Outline Plan, SHINGLE.

a. Passwords for two (2) weeks in advance will be issued to the Commanding General, SHINGLE Force.

- ## 9. REPORTS.

- By command of Lieutenant General CLARK:

Edwin B. Howard  
EDWIN B. HOWARD  
Colonel, G.S.C.  
A.C. of S., G-2

~~U. S. G. D. P. T. I.~~  
~~Excluded British Intelligence~~

UNCLASSIFIED

~~SECRET~~  
HEADQUARTERS FIFTH ARMY  
A. P. O. #464, U. S. Army

.....  
: ~~SECRET~~ :  
: Auth of: CG Fifth Army :  
: Initials: :  
: Date: 16 Jan 1944 :  
:.....

SHINGLE INTELLIGENCE SUMMARY NO. 9

COPY NO. 1347

16 January 1944

The G-2 Estimate dated 22 November 1943, Appendix No. 1 to Annex No. 1 to Outline Plan SHINGLE, dated 28 November 1943, is supplemented or corrected with the following information:

1. ENEMY CAPABILITIES:

a. Within the last few days there have been many indications that the enemy strength on the front of the Fifth Army is ebbing due to casualties, exhaustion, and possibly lowering of morale. One of the causes of this condition, no doubt, has been the recent continuous Allied attacks.

b. (1) The HERMANN GOERING Division has been used to stop penetrations of the enemy's line, namely in the vicinity of CERVARO and SAN BIAGIO. It has been suggested by the manner in which the enemy has committed elements of the HERMANN GOERING Division and withdrawing them at the first opportunity, that he probably plans to move it away but has been unable to move it because of the constant attacks and penetrations of the enemy's line. If the Allied attacks continue with increasing intensity, it appears that there is a possibility that the HERMANN GOERING Division may be kept on the present front until it can be relieved by some other unit.

(2) Similarly, the 29th Panzer Grenadier Division has been withdrawn from the front and again committed to actions to stop penetrations. Of twelve prisoners captured in the vicinity of CERVARO, three regiments and two divisions were identified, which indicates the resulting mixing up of units. However, prisoners state that this division, except for two battalions on the front line, has moved north of ROME. Judging from enemy action in the past it is probable that the remaining battalions will join the division before very long.

(3) The 15th Panzer Grenadier Division has had a similar experience in the case of the 104th Regiment, which was severely handled in the Allied attacks on MT. PORCHIA and vicinity. This regiment must have been exhausted, because it was pulled out of the line only to be committed again to stem the Allied attack.

(4) The 44th Division has lost much of its strength in casualties and prisoners.

(5) The 5th Mountain Division has covered a wide front and has consequently had to juggle its battalions around in and out of the line for the purpose of giving them needed rest. It had to be reinforced by the 115th P.G. Regiment of HERMANN GOERING Division to prevent a penetration of its lines. In spite of this reinforcement, it has been roughly handled by the French Corps. From prisoners it is now learned that the front of this division has further been reinforced by elements of 104th PG Regiment in the vicinity of VALLEROTUNDA.

UNCLASSIFIED



UNCLASSIFIED

~~SECRET~~  
~~TOP SECRET~~

(6) The 94th Division, although it has not been seriously engaged in combat, is occupying a very wide front of about 30 miles.

c. From the above, it can be deduced that the enemy has no fresh reserves and very little, if any, reserves left from its tired units. Also, his entire strength, including reinforcements, will probably be needed to defend his organized defensive positions.

d. It is estimated that, according to the present situation, which is changing rapidly, the following enemy force can be used to oppose Operation SHINGLE.

D-Day

1 Panzer Grenadier Division (including tank Bn)  
4 Bns of Parachutists  
1 Tank Bn estimated to have about 60 tanks  
Naval Defense personnel and antiaircraft units.  
1 antitank Bn, or equivalent

D plus 1

1 Panzer Grenadier Division  
1 Inf Regt (SS)  
1 Regimental combat team which, it is estimated, will be in 14 Corps reserve.  
Tank Regiment of HERMANN GOERING Panzer Division (May not be available)

e. In view of the weakening of enemy strength on the front as indicated above, it would appear doubtful if the enemy can hold the organized defensive line through CASSINO against a coordinated Army attack. Since this coordinated attack is to be launched before Operation SHINGLE, it is considered likely that the additional threat created by SHINGLE Operation will cause him to withdraw from his defensive position after he has appreciated the magnitude of that operation. SHINGLE Operation, as planned, will threaten seriously to cut his supply lines running south through ROME, namely the railroad and road net which is within striking distance of the landing force.

*For Peter J. King*  
EDWIN B. HOWARD  
Colonel, G.S.C.,  
A.C. of S., G-2

UNCLASSIFIED

UNCLASSIFIED

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

HEADQUARTERS FIFTH ARMY  
A. P. O. #464, U. S. Army

.....  
:  
: ~~SECRET~~ :  
: Auth: CG Fifth Army :  
: Initials: *EBH* :  
: Date: 11 January 1944 :  
: .....

COPY NO. 82

SHINGLE INTELLIGENCE SUMMARY NO. 8

11 January 1944

The G-2 Estimate dated 22 November 1943, Appendix No. 1 to Annex No. 1 to Outline Plan SHINGLE, dated 28 November 1943, is supplemented or corrected with the following information:

1. BEACHES - GENERAL INFORMATION

a. Beaches for Operation SHINGLE will be designated:

(1) STAR ASSAULT

- (a) X-ray Sector (AMERICAN) from F 845169 (Map Ref ITALY 1/100,000) southwards
- (b) Peter Sector (BRITISH) from F 845169 (Map Ref ITALY 1/100,000) northwards

(2) X-RAY SECTOR

- |     |          |        |        |
|-----|----------|--------|--------|
| (a) | X Green  | 935152 | 925160 |
| (b) | X Red    | 925160 | 914167 |
| (c) | X Yellow | 863174 | 857171 |

(3) PETER SECTOR

- |     |         |        |        |
|-----|---------|--------|--------|
| (a) | P Green | 810238 | 805245 |
| (b) | P Amber | 805245 | 803250 |
| (c) | P Red   | 803250 | 798258 |

2. BEACHES - X-RAY SECTOR (Maps: GSGS 4229, ITALY, 1/50,000, Sheets 158 II, III)

a. X-Red and X-Green Beaches.

(1) Name and Map Location

- (a) X-Red and X-Green Beaches; coordinates: 914167 - 935152
- (b) Size of Beach: Length - 2860 yards; Width - 10 to 25 yards
- (c) Gradient: 1:80 to 1:85
- (d) Exits: Exits are suitable for:
  - (1) Personnel: Entire beach satisfactory
  - (2) Armored vehicles and MTs. There are several possible exits from this beach, most of which will require some preparation and all will require Summerfeld track.

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

-1-

UNCLASSIFIED

UNCLASSIFIED

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

The distance from the beach to the metalled road behind the beach varies from 400 to 500 yards, except for the exit at 914168 which is 220 yards from the road. The first 20 yards of all exits is over rough beach sand and the next 100 to 400 yards will require preparation and matting. The following exits are listed in order of suitability for immediate use; i.e. distance to metalled road and need for the least preparation and matting:

Exit	Length of Preparation & Need for Sommerfeld Track	Distance from Beach to Metalled Road
914168	100 yards	220 yards
918165	150 yards	500 yards
919164	200 yards	420 yards
935152	300 yards	410 yards
917165	250 yards	500 yards
922162	400 yards	400 yards
929157	450 yards	450 yards

(e) Suitability for:

- (1) Types of craft: Entire beach is suitable for LCVP and LCA; there are probably places where LCT and LCI can beach. Pontoons are required for LST.
- (2) Beach maintenance: Beach can support one reinforced infantry division for a limited period.

(f) Port facilities: Nil

- (g) Naval approach: A sand bar about 150 yards off shore extends the entire length of the beach with the exception of a gap of some 400 yards located approximately in the center of the beach. The weather may cause considerable shifting of this bar, but a minimum of six feet of water over the bar may be expected. Inside this outer bar the approach is unobstructed up to a point about 50 yards from the beach where another bar extends the entire length of the beach. The depth of water over the inner bar is about two feet and does not deepen inshore of this bar. The composition of the sea bottom is not confirmed but it is believed to be firm sand. The beach is exposed to the south and west.

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~TOP SECRET~~  
~~TOP SECRET~~

- (h) Description of Beach: The entire beach (914167 - 935152) is about 2860 yards in length and varies from 10 to 25 yards in width. It is arbitrarily divided into two equal beaches, X Red (914167 - 925160) and X Green (925160 - 935152). The sand appears to be rough. Immediately to the rear of the beach proper a sand dune formation, interspersed with loose boulders and rocky outcrops (possibly lava) rises gradually in some places and rather abruptly in others for about 250 yards to a low plateau at road level. The terrain lying between the sand dune formation and the metalled two-way road, 500 yards in rear of and paralleling the coast, is flat. The number of existing trails would indicate that the ground is firm. The topography of the land does not permit rapid drainage.
- (i) Conclusions:
- (1) The beaches will be difficult to locate accurately at night.
  - (2) An on-shore wind will make landing operations hazardous.
  - (3) There is a definite, strong possibility that the inner bar, lying 50 yards offshore, will not allow the passage of landing craft beyond that point.
  - (4) Information concerning the depth of water inside the bar indicates the possibility of 150 feet of wading toward the beach in water knee-high and in some instances chest-high.
  - (5) The outer sand bar will not permit the passage of an LST. Reconnaissance of the waters may reveal gaps in the bar and it may be possible to bring in LST's in daylight, i.e. gap in outer bar between X Red and X Green beaches. Pontoons will still be needed because of the poor gradient.
  - (6) The sea-bottom on either side of X Red and X Green beaches is rocky and dangerous for landing craft.
  - (7) Adverse weather will cause difficulties in motor movement off the road-net over the plateau in rear of beach.

b. X - Yellow Beach

- (1) Name and Map Location
  - (a) X Yellow Beach; coordinates: 857171 - 863174.
  - (b) Size of Beach: Length - 820 yards; Width: 40 yards.
  - (c) Gradient: 1:130 to 1:160

~~TOP SECRET~~  
~~TOP SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~U.S. SECRET~~  
~~Equal British Most SECRET~~

(d) Exits suitable for:

- (1) Personnel: Length of beach by scaling the sea wall.
- (2) Armored vehicles and MT. Exits from this beach will require first an exit from the beach into the street running parallel to and just in rear of the beach; and, second, an exit from this street into the main street of ANZIO and highways leading therefrom. The only existing exit from the beach to the street appears to be at 857170 though another might be easily constructed west of the pier and parking area. The only apparent exit from the street into the road net is at 864175 which leads on to the ANZIO - NETTUNO highway. This exit however, is blocked by a large bomb crater at 859172 and will require filling before the exit can be used. Exits from the street into the town of ANZIO are blocked by barricades and rubble from bombed buildings.

(e) Suitability for:

- (1) Types of craft: Beach is suitable for LCVP, LCA, and DUKWS.
  - (2) Beach maintenance: Not suitable, but after development beach could supplement discharge into the ports by use of DUKWS unloading from LCTs, coasters, and Liberty ships.
- (f) Port facilities: The harbor is protected on the south and west by two moles. The outer quay on the south mole can accommodate two ships, 150 feet long with a draft of 12 feet, and the inner three ships, 150 feet long with a draft of 10 feet. The south end of the mole on the western side of the harbor can accommodate two ships, 250 feet long with a draft of 14 feet. Infantry stores and MT can be landed at the quay but there appears to be no facilities for use of LCTs.
- (g) Naval Approach: There are no offshore rocks or bars but the gradient is so shallow that craft drawing three feet will ground 150 yards offshore. There is a wrecked ship, part of which lies above water about 800 yards east of the end of the mole of PORTO d'ANZIO. The town of ANZIO is situated on the high ground in back of the beach and the small port just east of the beach, thus providing easy identification of the beach for approaching ships.
- (h) Description of Beach: The beach is covered by rough sand, is 820 yards long and 40 yards wide. It is backed by a sea wall varying in height from three to six feet. It is flanked to the west by a jetty and to the east by a stone pier. There is a ruined casino in the left half of the beach.

~~U.S. SECRET~~  
~~Equal British Most SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

(i) Conclusions:

- (1) Because of the poor gradient, the landing on X-Yellow Beach will necessitate about 150 yards of wading.
- (2) Provided barricaded exits are cleared quickly and adequately, a road net can be easily obtained.
- (3) Capture of the port will facilitate the maintenance of the landing forces.

3. BEACHES - PETER SECTOR (Maps: GSGS 4229, ITALY, 1/50,000, Sheets 158 II, III)

a. Name and location:

- (1) PETER Beach, coordinates 810238 - 798258; Gradient: 1:80 to 1:90
- (2) Size of beach: Length - 2600 yards; Width: 30 to 60 yards.
- (3) Exits suitable for:
  - (a) Personnel: Entire beach satisfactory.
  - (b) Armored vehicles and motor transport: There are rough tracks leading off the beach at 812235 and 809239. To develop these tracks as suitable exits will require bulldozing for both tracks. Some tree clearing will be necessary for the exit at 812235 and about 250 yards of matting is needed at 809239. Probable exits exist between 806246 and 804249, but bulldozing and matting will be required up to the metalled road which runs behind the beach.
- (4) Suitability for:
  - (a) Types of craft: Beach is suitable for LCVF and LCA, and possibly LCT. Pontoon required for LSTs.
  - (b) Beach maintenance: Beach can support one reinforced infantry division for a limited period, after considerable preparation of exit roads.
- (5) Port Facilities: Nil
- (6) Naval Approach: A sand bar approximately 150 yards offshore extends along the entire beach. Approximately six feet of water may be expected over this bar. From 50 to 75 yards from shore, with about three feet of water covering it, another sand bar extends along the entire beach. The beach is exposed to the south and southwest swells and a heavy surf would seriously hamper landing operations.

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~SECRET~~  
~~NO FOREIGN DISSEM~~

- (7) Description of Beach: The entire beach (810238 - 798258) is 2600 yards long and from 30 to 60 yards wide. It is covered with sand, probably soft, and in some places vertical banks, 5 feet high, block an entrance to the dunes in the rear of the beach. The dunes, about 150 yards wide and covered with scrub, extend along the greater part of the beach. The dunes are backed by a belt of trees varying in depth between 50 to 400 yards, behind which are fields and orchards. A metalled road runs roughly parallel to and some 500 to 800 yards in rear of the beach.
- (8) Conclusions:
  - (a) The beach may be difficult to locate at night.
  - (b) Due to exposed position, heavy wind will seriously impede landing operations.
  - (c) Sand bars make a dry landing unlikely and 200 to 300 feet of wading may be anticipated.
  - (d) Beach is unsuitable for LSTs unless 400 feet of pontoon is supplied for each unloading.
- (9) Defenses: corroborated reports indicate that the beaches are mined with tellermines. The mined areas are not large, and there appears to be gaps in the minefields. There are no indications of minefields in rear of the beaches.
- (10) Identification of Beaches: Silhouettes and oblique photos marking beaches and important landmarks will be furnished separately.

Edwin Howard

EDWIN B. HOWARD  
Colonel, G.S.C.  
A.C. of S., G-2

~~SECRET~~  
~~U. S. GOVERNMENT~~  
~~LOGAN'S BAYVIEW MOOI SECRET~~

-6-

UNCLASSIFIED

UNCLASSIFIED

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

HEADQUARTERS FIFTH ARMY  
A.P.O. #464, U. S. Army

.....  
: ~~SECRET~~ :  
:Auth: CG Fifth Army :  
:Initials: *EBH* :  
:Date: 4 January 1943 :  
:.....:

COPY NO. 82

SHINGLE INTELLIGENCE SUMMARY NO. 7

4 January 1943

The G-2 Estimate dated 22 November 1943, Appendix No. 1 to Annex No. 1 to Outline Plan SHINGLE, dated 28 November 1943, is supplemented or corrected with the following information:

1. WEATHER

a. General.

(1) Location and Topography.

- (a) The area covered by this report is the rolling plain of the COMPAGNA DI ROMA between the SABINI Mountains and the TYRRHENIAN Sea. The city of ROME is located seventeen miles upstream from the mouth of the River TIBER. The river flows in a north-south direction through the city and has a width of about three hundred feet. Fifteen miles to the southeast, the MONTI ALBANI rise to 3,130 feet. To the northwest, 25 miles from the city, are the SABATINI Mountains with more than 2,000 feet elevation. Forty miles to the east, the SABINI Mountains rise to 4,000 feet and merge seventy miles east of ROME with the main ridge of the Central APPENNINES with peaks 9,000 feet in elevation. Proximity to the ocean and mountain ranges has considerable influence upon the climate of this area.

(2) Climatic Conditions.

- (a) The climate of ROME is generally under the influence of the maritime tropical air masses of the MEDITERRANEAN Region. The mountains directly to the north and the higher ranges of the ALPS which form the northern boundary of ITALY protect it from direct invasions of polar air masses. Maritime polar air masses from the ATLANTIC, however, occasionally penetrate across SPAIN and FRANCE into this region. The APPENNINES Mountains to the east form a protective barrier against outbursts of continental polar air masses which occur in winter from the cold air reservoir of BALKANS and RUSSIA. This leads to exceedingly mild winter temperatures (January mean 45°). The lowest temperature on record is 18°. In summer, the mercury occasionally climbs to the oppressive stage with the mean daily maximum in July and August exceeding 86°. The absolute maximum temperature is 104°. The temperature will dip below freezing only three times during an average winter month.

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

-1-

UNCLASSIFIED



UNCLASSIFIED

~~U. S. S E C R E T~~  
~~Equals British 1937 SECRET~~

(3) February in Particular.

- (a) February is the turning point of the winter season. Temperatures commence their annual climb from the January low. Precipitation reaches a minimum that will not be equalled until May. In fact, only four other months show a smaller average rainfall. Cloudiness and rainfall are lower than at any time since October. Wind velocities are also down from the winter maximum in January. In all meteorological elements February is "over the hump" from the unfavorable autumnal and winter rainy season.
- (b) The outstanding characteristic of February weather in the ROME South area is the frequent periods of rainless, partly cloudy skies that justify the term, "Sunny ITALY". Rainless spells of ten days are common in this month. When the great cell of high barometric pressure builds up over Central EUROPE and the BALKANS, cool, dry northeast winds will prevail and bring periods of favorable operational weather for as long as ten days in a row. In 1932, no rain fell at VALMONTONE, twenty miles southeast of ROME and under the same climatic controls, from January 9th to February 9th and again from February 17th to 27th. In 1934, no measurable precipitation was registered from February 6th to 28th. The year 1939 had no rain from February 2nd to 13th and very little the rest of the month. These extremely dry periods, of course, do not occur every year, but their frequency is sufficient to justify optimism in those planning combined military operations in this area.

b. Ground Forces

(1) Temperature

- (a) February has an average temperature of 46.6°, an increase of two over the January low. The mean daily maximum is 55° and the mean daily minimum is 43°, giving an expected daily range of 12°. In an average year the mercury will climb to 63° on the warmest day and will fall to 30° on the coldest. The highest ever recorded at ROME was 68° and the absolute lowest in February was 18°. Anti-freeze solutions must be on hand, as an average of 2.6 days experience below freezing temperatures. Conditions on the coastal plain from ROME south to GAETA will not vary much from the above figures. North along the coast and eastward into the mountains, much more severe conditions will be found. Altitude is a greater temperature control than latitude.

~~U. S. S E C R E T~~  
~~Equals British 1937 SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~U. S. S. E. S. E. I.~~  
~~Equals British Most Secret~~

(2) Precipitation

- (a) Rainfall is relatively light. The average catch of 2.91 inches represents a sharp drop from the October-November maximum. Since most precipitation is of the showery type, great departures from normal may be expected. In February as much as 8.80 inches may fall, while there is one month on record when none fell. In three out of four Februarys the total will range between 0.75 inches and 4.75 inches.
- (b) Rain will fall on ten days, one less than the preceeding month. The wettest February had 26 days with precipitation, but the driest had none. In an ordinary year there will be from four to fifteen rainy days. The duration of precipitation is short. In seventy per-cent of the cases surveyed rain spells lasted 1 - 2 days; in thirty-four per-cent they continued 3 - 6 days; in only six per-cent did they persist for more than six consecutive days.
- (c) Other forms of precipitation are rare. Snow will fall in one of every two Februarys. The maximum depth is two inches, and the snow cover seldom survives twenty-four hours. To the east in the APPENNINES and southeast in the LIRI Valley, heavy falls and continued snow cover can be expected. Hail, often accompanying a moderate thunderstorm, will occur with about the same frequency as snow.

(3) Wind

- (a) The prevailing wind continues from the north and northeast with a total of 48 per-cent from that quadrant. South and southwest show seasonal increases to 17 per-cent and 14 per-cent, respectively. West is represented by 9 per-cent. All other directions blow less than 5 per-cent of the time. Wind velocities are generally low. Twenty-two per-cent return calms, and fifty-four per-cent between 1 and 7 miles-per-hour. Velocities from 8 to 18 miles-per-hour blow eighteen per-cent, and over 18 miles-per-hour only four per-cent. Occasionally this area may be affected by a severe cyclohic storm. About once a winter gales up to fifty-miles-per-hour may lash the coastal area with heavy seas and flood the mountains with torrential downpours.

(4) Cloudiness and Moisture

- (a) Moisture content both on the surface and aloft is high. The humidity averages 69 per-cent, but this condition is somewhat tempered by the coolness of the air. Cloudihess amounts to 5.6 tenths of the total sky, about the same as the previous

~~U. S. S. E. S. E. I.~~  
~~Equals British Most Secret~~

UNCLASSIFIED

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

month. There are few completely clear or totally overcast days. Partly cloudy days predominate with a monthly average of sixteen. Clear and cloudy days are about evenly divided with six each. Fog and mist are infrequent, occurring on only two or three days. Ground fog, however, is common early in the morning following a clear, cold night. Visibility may be restricted locally to less than one mile. This type fog dissipates rapidly with the heat of the rising sun.

(5) Visibility

- (a) Visibility is generally good. Typical of the MEDITERRANEAN climate, objects fifty miles distant may often be distinguished. In addition to ground fog, the chief limiting factors to clear vision are two: Precipitation and city smoke. With the passage of a cold front attendant showers and low ceilings may obstruct horizontal visibility to six miles or less for several hours. After a clear, calm night industrial smoke often settles over the city, leaving the outlying districts clear. The lack of fuel at the present time, however, minimizes this type of obstruction. The Sirocco with its thick dust-laden atmosphere, so common in Southern ITALY, is experienced only once a month and then in a modified form.

c. Aviation

(1) General

- (a) Flying weather in February shows a distinct improvement over the preceding months. When the high pressure cell over Central EUROPE and the BALKANS builds up, periods of four to six, and even ten, days of favorable flying weather may ensue. About two periods of this type occur each February. At other times ceiling, visibility, and sky coverage - the three limiting factors in tactical air support - close in to make effective cooperation between air and ground forces impossible

(2) Sky Condition

- (a) Ceiling is the height of clouds covering more than five-tenths of the sky. It is a factor of prime importance in all types of aerial bombardment. The existence of a low ceiling makes the undertaking of an air support mission a distinct gamble. The development of modern anti-aircraft weapons has constantly raised the minimum ceiling required for successful air activity. Dive bombers need at least 10,000 feet; medium bombers prefer 12,000 feet; and heavies operate best with at least 20,000 feet.

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

-4-

UNCLASSIFIED

UNCLASSIFIED

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

Cloudiness averages 56 per-cent in February and a large amount of this is below 10,000 feet. Exact statistics on cloud heights are not available. It may be estimated that 40 per-cent of February days will be unsuitable for dive bomber operation. Conditions along the coast will be more favorable than inland among the hills and mountains.

(3) Visibility

- (a) The greater the visibility, the greater will be the effectiveness and accuracy of air support. In general, visibilities are good in February. Obstructions to satisfactory vision will exist only about 20 per-cent of the time. The chief limiting factor is precipitation and low cloudiness accompanying an active cold front as it sweeps in from the sea. This condition, however, is usually of brief duration. Haze levels, which limit vertical visibility considerably, may develop two or three times a month and persist for three to four days. These may be expected when a high pressure cell stagnates over ITALY with little wind movement. In general, visibilities are at a minimum at dawn and will improve throughout the day unless there is a frontal disturbance in the vicinity.

(4) Icing

- (a) The general freezing level averages 7,000 feet in February, slightly higher than January. With an outbreak of cold, continental air, the critical level may fall as low as 3,000 feet. Both clear and rime icing occur. With a northeast wind blowing after the passage of a cold front and low clouds streaking across the skies, the danger of icing is very real. On the other hand, southwesterly winds will raise the icing level considerably.

(5) Winds Aloft

- (a) Upper winds in the ROME vicinity are subject to sudden shifts. The lowest levels are affected even in winter by local topography and by the land and sea effect. Above three thousand feet they respond to the shifting cyclonic circulation of the MEDITERRANEAN. If the winds are from the same direction of the compass at all levels, a continuance of the same weather is indicated. If they shift about aloft, watch out, for the weather will break shortly.

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~U. S. S. E. C. R. E. T~~  
~~Equals British MOST SECRET~~

d. Daily Almanac.

February 1944 -- ROME 42°00' N -- 12°30' E

<u>FEBRUARY</u>	<u>SUNRISE</u>	<u>SENSET</u>	<u>MOONRISE</u>	<u>MOONSET</u>	
1	0723	1725	1140	0029	FIRST QUARTER
2	0722	1726	1214	0135	
3	0721	1727	1250	0240	
4	0720	1728	1332	0339	
5	0719	1730	1417	0445	
6	0717	1731	1507	0525	
7	0716	1732	1601	0612	
8	0715	1734	1656	0653	
9	0714	1735	1753	0729	FULL MOON
10	0713	1737	1852	0801	
11	0711	1738	1950	0830	
12	0710	1739	2048	0857	
13	0709	1740	2146	0912	
14	0708	1741	2246	0949	
15	0707	1742	2347	1017	
16	0705	1744	----	1048	
17	0704	1745	0049	1119	LAST QUARTER
18	0702	1746	0154	1159	
19	0700	1747	0259	1247	
20	0659	1749	0401	1342	
21	0657	1751	0459	1446	
22	0655	1752	0554	1558	
23	0654	1753	0641	1714	
24	0653	1754	0723	1831	NEW MOON
25	0651	1755	0759	1947	
26	0649	1756	0832	2101	
27	0648	1757	0906	2213	
28	0647	1759	0938	2323	
29	0646	1800	1012	----	

All times are "A" Army time for 15° East.

Compiled from Berliner Astronomisches Jahrbuch 1944

Source:  
 Air Forces Weather Static  
 12th Weather Region  
 Mobile Unit No. 2

~~U. S. S. E. C. R. E. T~~  
~~Equals British MOST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~U. S. SECRET~~  
~~TOP SECRET MOST SECRET~~

2. AIR German Air Force Order of Battle, 20 December 1943

	ITALY	SOUTHERN FRANCE	GREECE, CRETE AND AEGEANS	TOTAL
L/R Bombers	150 (-30)	65 (-55)	65 (-65)	280 (-150)
Dive Bombers			30 (-30)	30 (-30)
Bomber Recce	20	15	20	55
S/E Fighters and Fighter Bombers	210 (/ 25)	10	40 (-10)	260 (/ 15)
T/E Fighters			10	10
Tac/R	10		10	20
Coastal	10	10	40 (-10)	60 (-10)
TOTAL	400 (-5)	100 (-55)	215 (-115)	715 (-175)

NOTE: Changes since 15 November 1943 are indicated in parentheses.

Source: NAAF Air Intelligence Summary No. 57.

*Edwin B. Howard*  
EDWIN B. HOWARD  
Colonel, G.S.C.,  
A.C. of S., G-2

~~U. S. SECRET~~  
~~TOP SECRET MOST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~U. S. S. E. S. E. T. E. T.~~  
~~Top Secret British Most Secret~~

HEADQUARTERS FIFTH ARMY  
A. P. O. #464, U. S. Army

.....  
: ~~U. S. S. E. S. E. T. E. T.~~ :  
:Auth: CG Fifth Army :  
:Initials: *824* :  
:Date: 3 January 1944 :  
:.....

COPY NO. 82

3 January 1944

SHINGLE INTELLIGENCE SUMMARY NO. 6

The G-2 Estimate dated 22 November 1943, Appendix No. 1 to Annex No. 1 to Outline Plan SHINGLE, dated 28 November 1943, is supplemented or corrected with the following instructions:

The offshore beach reconnaissance and observations were carried out by: Captain W. G. Davis, R.A., (ZSS.B.S.), C.S.M. Galloway, R.A., (Z.S.B.S.), Sub-Lieutenant T. Williams, R.N.V.R., and Ensign J. G. Donnell, U. S. Navy

The following members of the party to whom the task of carrying out observations was allocated, did not return with the P.T. Boat: Ensign K. E. Howe, U. S. Navy, and Ensign M. Pirro, U. S. Navy.

- 1835 hours The party left ISCHIA in P.T. 201 under the command of Lt. Patterson, U.S. Navy, 30 December 1943. There was a slight wind from the north-east and flat calm sea. Visibility good.
- 2130 hours Radar broke down. Lt. Patterson and Capt. Davis decided to continue with the operation and hoped to recognize the beach.
- 2230 hours Red tracer was seen whilst P.T. idling towards shore. Appeared to be fired from aircraft and in the direction of NETTUNO. This lasted until 2330 hours.
- 2320 hours A landfall was made at which Capt. Davis recognized as TORRE CALDARA. Being too far south, the P.T. changed course and headed north parallel with the beach. Some five minutes later TORRE S. LORENZO was sighted and Lt. Patterson dropped anchor slightly north of the center of the beach, approximately 1-1/2 miles from shore.

Report of Reconnaissance Carried Out by Capt. Davis and  
C.S.M. Galloway

- 2340 hours We launched our folbot and headed towards land on a magnetic course of 40°. Visibility 500 yards. Sea flat calm. Light offshore wind from east.
- 2358 hours We made a landfall (see panorama and photograph) and altered course proceeding north parallel with the beach until almost at right angles to TORRE S. LORENZO. LORENZO is most conspicuous.
- 0015 hours (31 December 1943) Altered course to shore being then some 600 yards off. Wind increased to Force 2. Visibility decreasing.
- 0020 hours Light appeared from direction of Tower, probably from a window. It only lasted a few seconds and was not likely to be connected with us.

~~U. S. S. E. S. E. T. E. T.~~  
~~Top Secret British Most Secret~~

UNCLASSIFIED

UNCLASSIFIED

~~U. S. SECRET~~  
~~Equals British Most Secret~~

- 0030 hours Sentry observed on foreshore south of Tower. I do not think we were observed.
- 0035 hours Folbot touched bottom at water's edge 200 yards south of Tower and 20 yards north of sentry. There was no surf, and conditions were ideal for the work in hand. Set was from southeast and wind off-shore. Planted stake for distance line and proceeded to take soundings at intervals of 10 yards. (See Graph (1) attached) (Also see panoramas and photographs) (F. 786275)
- 0105 hours Proceeded south starting from a position some 500 yards from shore. The wind was still rising, having then reached Force 3. We were being taken seawards, and at 0130 hours when we decided to alter course to shore, were some 1/2 mile off.
- 0200 hours. Touched shore and proceeded to take further soundings. No surf. Stake for distance line would not hold owing to wind moving folbot to sea, therefore soundings are approximate, though reasonably accurate. (See Graph 1-a attached) There is no sign of a sand bar further out than 120 yards. (F. 793267)
- 0215 hours Soundings complete, so proceeded north to landfall and then returned to parent vessel on our reciprocal course to that used when leaving P.T. for shore.
- Clouds were forming to the northwest and visibility reduced to 150 yards. The pick-up was not easy and we did not sight the P.T. until 0240 hours. We had flashed our pre-arranged signal, a blue light, in the direction of the parent vessel, but this was not seen by those aboard.
- 0245 hours Folbot inboard parent vessel. Sub-Lt. Williams and Ensign Donnell were aboard having completed their reconnaissance.
- Lights were seen moving along the beach in the vicinity of TORRE S. LORENZO. It was then raining and visibility was poor.
- 0330' hours A Star Shell was seen in the vicinity of TORRE S. LORENZO. Shortly afterwards another was observed further south. Star Shells continued to appear from the same positions at intervals of three to five minutes. The last being at 0450 hours, ten minutes after we had weighed anchor. P.T. 201 was anchored 1-1/2 miles from shore and could not be seen from beach.
- 0845 hours P.T. 201 arrived at ISCHIA.

OBSERVATIONS:

1. Request that more than two hours notice be given when change of operation has been made. Notice of operation together with Directive and Photographs was handed to me at 1630 hours. Operation due to start at 1830 hours.
2. The cooperation of Officers and crew of P.T. 201 was excellent.
3. There are few conspicuous landmarks on the north beach, but TORRE LORENZO can be easily recognizable from a distance of 1-1/2 miles. The position from which I took soundings 1-a can be identified by the sudden drop in level in

~~U. S. SECRET~~  
~~Equals British Most Secret~~

UNCLASSIFIED



UNCLASSIFIED

~~U. C. SECRET~~  
~~Equal British Most Secret~~

silhouette of the north end of wood in comparison with low land immediately north.

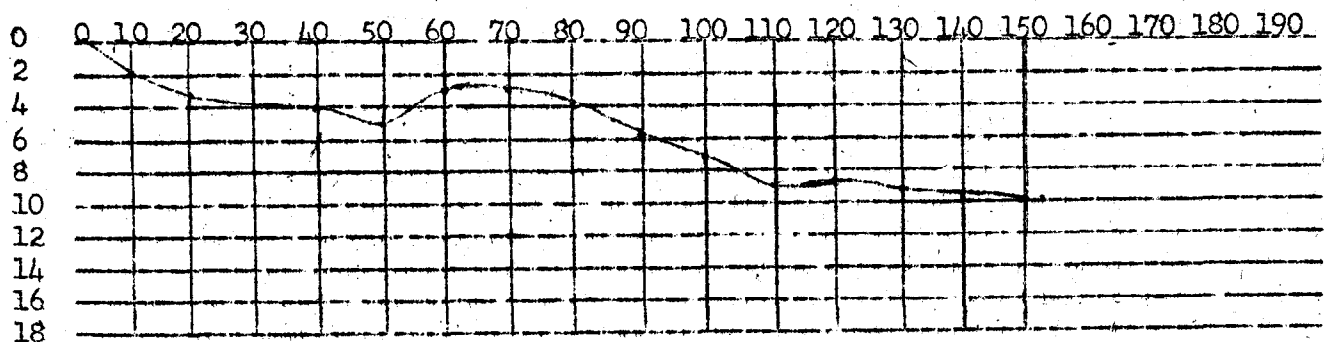
4. No shoals or rocks were encountered.
5. My reasons are stated in report of loss of one crew, why I consider beach not compromised.
6. C.S.M. Galloway has proved himself very capable in handling a folbot in operations of this type: This being his third in that area. His behavior has been magnificent throughout these operations and he fears nothing.

31st Dec/43

Signed/ W. G. DAVIS  
O/C Z.S.B.S. Naples Area

Graph No. 1

Depths are shown in FEET, distances offshore shown in YARDS (F. 786275)



The vertical scale is greatly exaggerated.

~~U. C. SECRET~~  
~~Equal British Most Secret~~

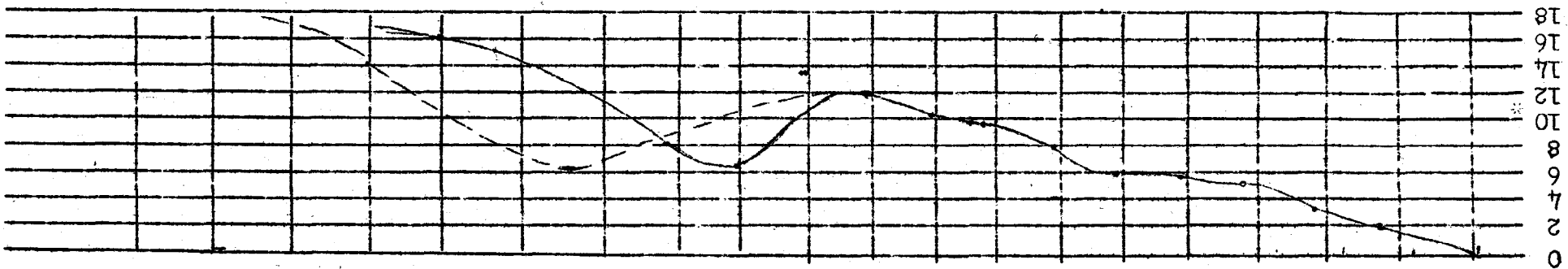
UNCLASSIFIED

UNCLASSIFIED

~~U.S. SECRET~~  
~~NAVY SECRET~~

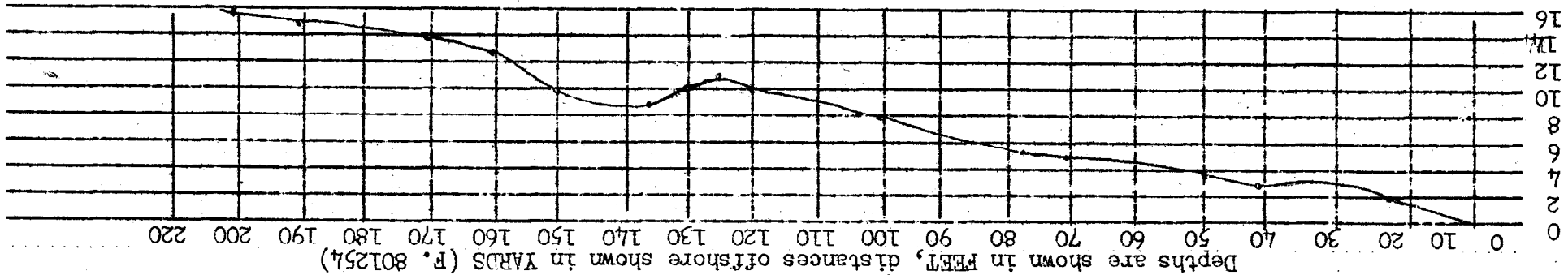
F 793267

Graph No. 1-a  
Depths are shown in FEET, distance offshore shown in YARDS (1000 YARDS)



Vertical scale is greatly exaggerated.  
Dotted line shows probable position of outer bar as Capt. Davis says his distance offshore on this line of soundings  
may be slightly in error, but soundings are accurate.

Graph No. 2

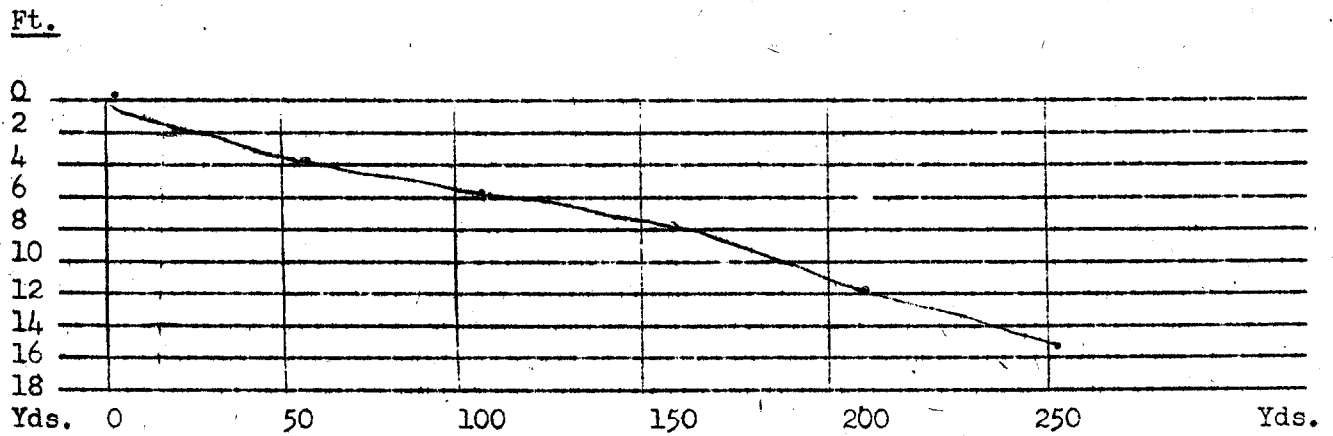


UNCLASSIFIED

~~U.S. SECRET~~  
~~NAVY SECRET~~

UNCLASSIFIED

~~U. S. SECRET~~  
~~Equal Division MOST SECRET~~



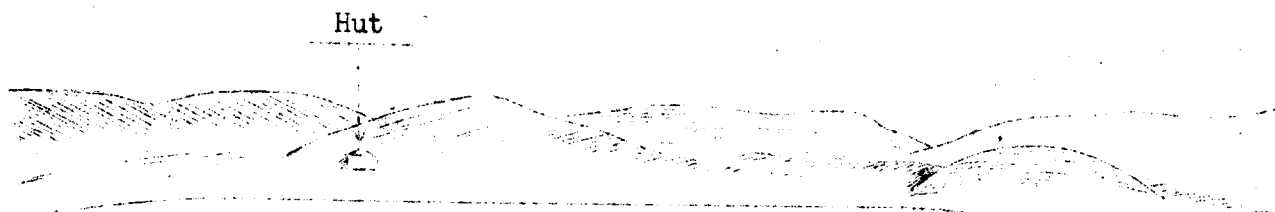
(See Report of 4 December 1943)  
Approximate south end of BLUE MAIN Beach (F. 810238)

~~U. S. SECRET~~  
~~Equal Division MOST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~U. S. SECRET~~  
~~Results British 1951 Chart~~



Landfall

Soundings	2
every ten	2-6
yards	3
in feet	4
	4-6
	5-0
	5-0
	5-6
	6
	8
	10
	11
	10
	9
	10
	13-6
	14-6
	14-6
	15-0
	15-3
	16-0
	16

Soundings (F. 801254) as shown in Graph No. 2

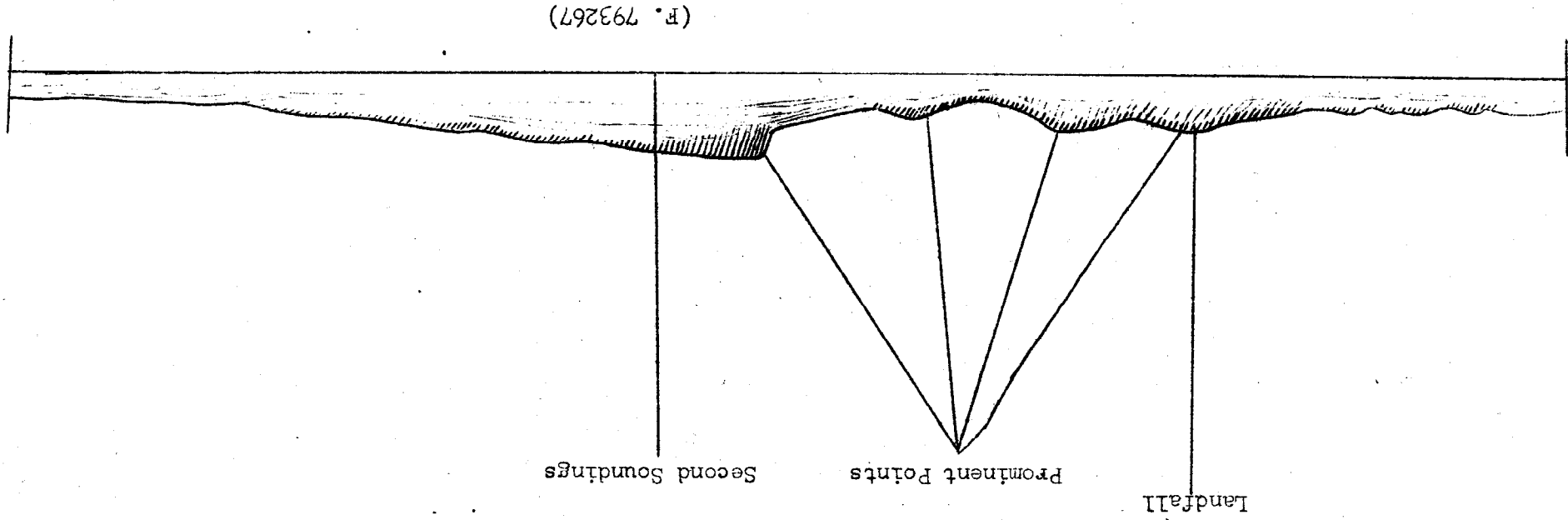
~~U. S. SECRET~~  
~~Results British 1951 Chart~~

UNCLASSIFIED

UNCLASSIFIED

~~U.S. COAST AND GEODETIC SURVEY~~  
~~Hydrographic Survey~~

Scale: 8 1/2 Mile (App)  
Range: 200 yards  
Visibility: Fair  
Sea: Moderate  
Time: 0205 hours  
Date: 31 December 1943



Panorama - Capt. Davis Report

~~U.S. COAST AND GEODETIC SURVEY~~  
~~Hydrographic Survey~~

UNCLASSIFIED



UNCLASSIFIED

~~U. S. S. E. C. R. E. T.~~  
~~Equal to British MOST SECRET~~

Report by Capt W. G. Davis, R.A. on the two members of his party who failed to return from the operation; Ensign K. E. Howe, U. S. Navy, Ensign M. Pirro, U. S. Navy.

The above mentioned officers were detailed to carry out an offshore reconnaissance as set out in Operational Order dated 28th December 1943.

At 2340 hours, 30 December 1943, Ensigns Howe and Pirro left the P.T. Boat No. 201 to proceed inshore to carry out observations of the beach.

C.S.M. Galloway and I were first to launch from P.T. 201 and the last I saw of these officers was as we were pulling away from the vessel they were preparing to launch their folbot.

During the briefing which took part on the P.T. after we left ISCHIA I instructed Howe and Pirro not to go too near the shore, in fact not nearer than 150 yards, at any point. They assured me that they could carry out their observations from this distance.

At 0245 hours, 31 December 1943, when I arrived back to the parent vessel I was informed that Howe and Pirro had not yet returned.

They had been expected back first, but as there was still 15 minutes left, the homing time being 0300 hours, we were not unduly concerned.

Lights were observed moving along the beach. They were moving quickly and may have been car lights.

At 0250 hours it started to rain and visibility was about 150 yards.

Star Shells were seen from the direction of the beach. These started at 0330 hours and continued at intervals of three to five minutes until 0450 hours.

Though it is not possible to say what happened to these officers, in my opinion only one of two things is likely:

- a. That they failed to locate the parent vessel.
- b. That their craft overturned.

In the first case they would proceed south keeping the coast in view until the weather became too bad and they would have to put ashore and proceed overland. Their plan was to follow the coast until east of PONZA and then make for PONZA. The weather being so unfavorable for carrying out this plan, they would land as far down the coast as possible, conceal or destroy their folbot, and return to base across country. They were carrying escape rations and Italian Lire.

~~U. S. S. E. C. R. E. T.~~  
~~Equal to British MOST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

I do not think (b) is likely. The sea was so calm that a child could handle a folbot without trouble. If, however, they had encountered rock this might have caused them trouble.

If they had carried out my instructions, as I have no doubt they did, the chances of them being seen from the shore are remote.

As both folbot No. 2 and I had seen activity ashore it is just possible that one of us had been the cause of the lights on the beach and the Star Shells. If Howe and Pirro have been taken prisoner they have no equipment with them which might give the enemy an idea of what was taking place. They would either use the story of missing airmen or say nothing. They favored the latter.

31 December 1943

Signed/ W. G. DAVIS  
Captain, R.A.

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

-2-

UNCLASSIFIED



UNCLASSIFIED

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

SUBJECT: Offshore Reconnaissance

On the night of the 30/31 December 1943, No. 2 Boat of the Reconnaissance Party, manned by Sub-Lt. T. Williams, R.N.V.R., and Ensign J. Donnell, U.S.N., was launched from P.T. 201 at 2340 hours.

2340 hours Proceeded to beach. Course 090°.

0015 hours Light sighted inshore.

0030 hours Landfall definitely identified. One sentry observed crossing beach to a hut, entering and shutting the door. The hut may be seen on aerial photographs. Movements of enemy observed for ten minutes.

0040 hours Turned 090° from beach. Proceeded approximately 400 yards south of landfall.

0045 hours Light inshore. Sentry observed patrolling southwards.

0055 hours Commenced first line of soundings from inshore. Detailed separately. (F. 801254)

0130 hours Line of soundings completed. Began line of soundings approximately 300 yards from and parallel to beach.

0145 hours In view of deteriorating weather conditions, enemy activity on beach, decided to return to P.T. 201. The reel (beach line) was out of action. Course 270°.

0225 hours Boarded P.T. 201. Behavior of sentries confirmed that the presence of No. 2 folbot was unsuspected.

Weather:	Moderate
Surf:	Nil
Bottom:	Firm sand. No rocks encountered.
Sentries:	Somnolent
Visibility:	200 yards
Set:	To NNW
Wind:	From NE

The tower was visible through glasses at all times.

Signed/ T. WILLIAMS  
Sub-Lt, R.N.V.R.

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

-1-

UNCLASSIFIED

UNCLASSIFIED

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

HEADQUARTERS FIFTH ARMY  
A, P. O. #464, U. S. Army

.....  
: ~~SECRET~~ :  
: Auth: CG Fifth Army: :  
: Initials: *EFH* : :  
: Date: 30 Dec 1943 : :  
:.....

30 December 1943

SHINGLE INTELLIGENCE SUMMARY NO. 5

COPY NO. 82

The G-2 Estimate dated 22 November 1943, Appendix No. 1 to Annex No. 1 to Outline Plan SHINGLE, dated 28 November 1943, is supplemented or corrected with the following information:

1. Revision of Intelligence On STAR ASSAULT BEACH

Latest wave studies show the gradient to be 1:80 for RED BEACH and 1:85 for GREEN BEACH (as by dispatch from ComNavNaw). The depth of water over the outer bar (150 yards offshore) is at least 6 or 8 feet, never reaching the 4 or 5 foot depth formerly reported.

When planning for suitability for types of craft, it must be assumed that LST will clear the bar only in places to be determined by reconnaissance.

2. Revision of Intelligence on Ranger Beach (Yellow)

It has been impossible on photographs available to date to get a gradient by wave measurement on this beach, but gradients obtained close east of the beach indicate that the charted gradient of 1:160 reported previously for this beach is fairly reliable, although it may be slightly pessimistic.

*Edwin B. Howard*  
EDWIN B. HOWARD  
Colonel, G.S.C.,  
A.C. of S., G-2

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

-1-

UNCLASSIFIED

UNCLASSIFIED

~~U. S. SECRET~~  
~~EXCLUDED FROM DISSEMINATION~~

HEADQUARTERS FIFTH ARMY  
A. P. O. #464, U. S. Army

.....  
: ~~U. S. SECRET~~ :  
: Auth: CG Fifth Army :  
: Initials: *ELH* :  
: Date: 30 December 1943: :  
: .....

COPY NO. 82

SHINGLE INTELLIGENCE SUMMARY NO. 4

30 December 1943

The G-2 Estimate dated 22 November 1943, Appendix No. 1 To Annex No. 1 to Outline Plan SHINGLE, dated 28 November 1943, is supplemented or corrected with the following information:

1. ENEMY CAPABILITIES

An attack on the coast line in the vicinity of ANZIO by a force the size of a Corps will become an emergency to be met by all the resources and strength available to the German High Command in ITALY. It will threaten the safety of the Tenth Army. It will also threaten to seize ROME and the airfields in the vicinity thereof which are of such great importance.

As soon as the Germans are able to appreciate the magnitude of our landing attack and that there is no attack at other points along the coast, it will then become necessary for him to concentrate enough force to defeat the landing attack if possible. If he is unable to concentrate enough force due to Allied air action or other interruptions or lack of availability of forces, it then becomes all important to him to endeavor to isolate the landing force and prevent a further build-up and its further advance. If he permits our attack to take the key terrain southeast of ROME through which the road net generally runs, the safety of the Tenth Army would then become seriously threatened.

If the enemy is unable to defeat our landing force or to isolate it to such an extent that it will no longer become a serious threat, then he must withdraw the Tenth Army to the northwest and thereby give up the well-organized defensive zone which he now occupies. After the withdrawal under these conditions, the first defensive position which he could take in the defense of ROME would be a line running northeast - southwest, defending the heights M. FAETE in the general vicinity of VELLETRI.

Although the enemy is capable of continuing to defend in the defensive zone northeast and southwest of CASSINO in spite of our successful landing, it is considered improbable that he would adopt this line of action unless he believes that he could defeat the landing force and thereby prevent it from becoming a serious threat to ROME and to the rear of the Tenth Army.

For the defense against our landing operation it is estimated that the enemy will have available a Corps headquarters, possibly Flieger Corps XI, and the troops immediately available are estimated to be: a Panzer Grenadier Division, possibly the 3rd; an infantry division of questionable quality, possibly a Line of Communications division; parachute troops of estimated strength of three battalions. In view of the recent action of the enemy in moving elements of the 44th Infantry Division into the sector of the 29th Panzer Grenadier Division and the fact that the 29th Panzer Grenadier Division has been in action practically

~~U. S. SECRET~~  
~~EXCLUDED FROM DISSEMINATION~~

UNCLASSIFIED

UNCLASSIFIED

~~SECRET~~  
~~Equally British MOST SECRET~~

continuously beginning with the battle of SALERNO, there is a possibility that that division may be withdrawn from the line for rest and refit. Therefore, the possibility that the 29th Panzer Grenadier Division may be available in the ROME area at the time of the landing must be considered. The presence in the ROME area of 20 to 30 tanks has also been reliably reported.

Taking into consideration the long stretch of coast line which it is estimated the troops in the ROME area must defend, it is estimated that the force which may be available for the defense of the beaches in the landing area or the area within supporting distance of the beaches is approximately two regiments, reinforced, and 20 to 30 tanks. Therefore, the landing force could be expected to be opposed by those two reinforced regiments within a short time after landing. As for the defense of the beaches, please see Annotated Maps and Mosaics which have been furnished. For the manning of coast defense guns, the Germans employ naval personnel, which no doubt will be available for the defense of the landing area. For the build-up of forces during D-day, it is considered that parachute units of the strength of about three battalions; a regimental combat team of Hermann Goering Panzer Division, now considered to be in XIV Army Corps reserve; 20 to 30 tanks; and another regimental combat team from the 3rd Panzer Grenadier Division will be available.

\* On D / 1 it is estimated that another regimental combat team will be available either from the 3rd or 29th Panzer Grenadier Divisions, depending on the dispositions at the time. The strength so far given as available on D-day and D / 1 is based on the assumption that the 29th Panzer Grenadier Division will be available in the ROME area at the time of the landing. In addition to the above, it has been reported that a motorized infantry regiment, possibly SS troops, is in the area west of FLORENCE. In view of the fact that this regiment is motorized, it is estimated that it can be available in the landing area on D / 1

By D / 2 the German High Command may have appreciated that the Eighth Army front has been weakened. In this case it is considered likely that either the 90th Panzer Grenadier Division or the 26th Panzer Division may be withdrawn from the front of the Eighth Army and employed to reinforce the troops defending against the landing.

It is estimated that one of the indicated divisions could reach the landing area on D / 3. In case this division should commit its units piecemeal, it is possible that one of the regiments could reach the battle area by D / 2.

If our attack up Highway 6 is powerful enough, aggressive and continuous without a letup, and is initiated before the landing, it is estimated that the enemy may not be able to withdraw further troops from the line for reinforcing the landing area.

In view of the emergency created by the landing, it is estimated according to current enemy dispositions in Northern ITALY that two infantry divisions could be made available to reinforce in the landing area. Judging by the time the enemy has required for troop movements by rail in the past, it is estimated that these two divisions could be available in the landing area on D / 16.

~~SECRET~~  
~~Equally British MOST SECRET~~

UNCLASSIFIED

~~U.S. SECRET~~  
~~Excluded from automatic downgrading and declassification~~  
~~Excluded from automatic downgrading and declassification~~

To summarize the above, it is estimated that at the end of D + 3 the forces available to oppose the landing may be three divisions of two infantry regiments each; one regimental combat team; one infantry regiment; three parachute battalions; and two tank companies. The estimated strength of the above force is about 31,300. By D + 16 two further infantry divisions may arrive in the landing area, adding a strength of about 30,000. The total strength at the end of D + 16 would be about 61,300.

### CAPITULATION

#### SCHEDULE OF BUILDUP

Date	Force	Estimated Strength	Totals
D-day	2 PG Regimental Combat teams	6,000	
Initial resistance	Naval personnel and antiaircraft	500	
Reinforcements	3 Parachute Battalions	1,500	
	2 PG Regimental Combat teams	6,000	
	20 to 30 tanks	300	14,300
D + 1	1 PG Regimental Combat team	3,000	
	1 Panzer Grenadier Regt	2,000	19,300
D + 2	1 PG Regimental Combat team	3,000	22,300
D + 3	Remainder of Panzer or Panzer Grenadier Division	9,000	31,300
D + 16	2 Infantry Divisions	30,000	61,300

NOTE: The above are estimated figures only. Exact figures can not be given.

The above estimate does not take into consideration the fact that by Allied air action, by increased action of Italian resistance groups, and by an effective cover plan, the bringing in of reinforcements to the landing area may be greatly

~~U.S. SECRET~~  
~~Excluded from automatic downgrading and declassification~~

~~SECRET~~  
~~TOP SECRET~~

reduced. It will be noted that it will be necessary for the enemy to move his reinforcements over mountainous roads, stream crossings, and in the case of two divisions from Northern ITALY, by rail if not by marching. By effective bombing of routes and air attacks of movements it is believed that some of his reinforcements can be delayed. Some reinforcements, possibly two regimental combat teams or a division, which will likely be in the area immediately north of the TIBER River, could be delayed or isolated from the battlefield by effectively bombing the river crossings.

It is estimated that the danger of underground activity in ROME and vicinity among the Italians will require the Germans to employ approximately one division, estimated to be the Lines of Communications division, for the purpose of keeping the network of roads and railroads through ROME open. A stimulation of resistance groups and underground activity might possibly divert further German forces in the area.

The situation is changing rapidly, which will probably require frequent changes in the G-2 Estimate.

*Edwin B. Howard*

EDWIN B. HOWARD  
Colonel, G.S.C.  
A.C. of S., G-2

~~SECRET~~  
~~TOP SECRET~~

UNCLASSIFIED

~~U. S. SECRET~~  
~~Equals British SECRET~~

HEADQUARTERS FIFTH ARMY  
A. P. O. #464, U.S.S. Army

.....  
: ~~SECRET~~ :  
:Auth: CG Fifth Army :  
:Initials: *CBH* :  
:Date: 17 December 1943:  
:.....:

COPY NO. 82

SHINGLE INTELLIGENCE SUMMARY NO. 3

17 December 1943

The G-2 Estimate dated 22 November 1943, Appendix No. 1 to Annex No. 1 to Outline Plan SHINGLE, dated 28 November 1943, is supplemented or corrected with the following information:

1. BEACHES

a. Divisional Landing Beach - Star Assault Beach.

CHART - H.O. 3943

-----  
GSGS SHEET NO. AND COORDINATES - 158 (1/25,000 scale) 914168 - 936152 -  
Center - 925160  
-----

LATITUDE AND LONGITUDE:

North End: Lat 41°26'47.7" N. Lon 12°42'01.2" E.  
Center: Lat 41°26'20.1" N. Lon 12°42'47.8" E.  
South End: Lat 41°25'57.8" N. Lon 12°43'33.6" E.

-----  
ESTIMATED UNDERWATER GRADIENT: To Follow LENGTH: 2860 yards WIDTH: 10 to 25  
yards  
-----

APPROACH:

At 150 yards offshore there is an ill-formed bar which is likely subject to considerable shifting. The charted gradients and photographs indicate an uneven sea bottom. Exposed to south and east. German shallow draft F-boats have been observed along this Coast. Additional details to follow.

DESCRIPTION:

Sand, appears rough. Backed by low, loose sand belt varying in width from 200 to 250 yards and extending the full length of the beach. Large black rocks exposed among sand dunes.

Beach Exits: 936152, 935153, 931156, 929156, 923162, 920164, 916166, and 915167.

A rock-macadam road parallels the beach its entire length --- 400 yards inland.

SUITABILITY FOR BEACH MAINTENANCE:

This beach (above the water line) is suitable for use in maintaining one reinforced division over the beach for a limited time.

~~U. S. SECRET~~  
~~Equals British SECRET~~

-1-

UNCLASSIFIED

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

CHART - H.O. - 3943

LATITUDE AND LONGITUDE:

ESTIMATED UNDERWATER GRADIENT: To Follow LENGTH: 820 yards WIDTH: 40 yards

A wrecked ship (length 200'), part of which is above water, lies about 800 yards east of the end of the mole of PORTO ANZIO. Identification should be made easy by the town of ANZIO, situated on high ground back of the beach and small port just east of the beach. Just behind the beach in the center sector there is a large, tall, conspicuous building. German F-boats have been observed along this Coast.

Sandy beach flanked at either end by a low narrow jetty and backed by a sea wall about 3' to 7' high. Only exit from beach over seawall at west end. Otherwise wall is an obstacle to vehicle movement off the beach. Ruins of a large casino project 100 ft. seaward from the center of the beach. The town of ANZIO is behind and westward of the seawall on a steeply rising slope. Exits for vehicles at 858170, 857170 and 856174 have been blocked by barricades and by bomb debris. These exits could be cleared for passage of DUK'S by utilizing two light (airborne) bulldozers; estimated time, if no further blocking takes place is one to two hours. Exit at 856174 could be cleared in 30 minutes for passage of DUK'S by using explosives to take out concrete post obstacles and by using hand tools to clear resulting small debris. Exit at 864174 may be clear now; air coverage does not positively reveal obstacles. Reasoning logically some sort of road block should be encountered here.

Poor initially; could supplement discharge into port after development. After improvement of exits, and assuming an adequate number of DUKWS available for unloading supplies, this beach could handle about 300 tons per day.

a. Mines. Corroborated reports indicate that both beaches are mined with Tellermine. There appear to be gaps between the minefields. Mining is not extensive, and the mined areas are not large. There is no indication of mine fields in rear of the beaches.

~~U. S. G. P. C. S. T.~~  
~~Handwritten: POLISH FRONT SECRET~~

UNCLASSIFIED



UNCLASSIFIED

~~U. S. S. E. S. R. E. I.~~  
~~Equal, British POST SECRET~~

b. Star Assault Beach. (Green and Red) This beach is flanked by two pillboxes, possibly unoccupied. A few MG emplacements are situated behind the coastal road.

It is estimated that the possible CD battery at F 880242 could fire on this beach and that the two light coastal guns (probably Italian) at F 891177 probably could also cover the approaches.

(See Enemy Defense Overprint, Inclosure No. 1)

c. Ranger Beach (Yellow) No fixed defenses appear on this beach, but it is believed that the dual purpose battery at F 816330, the suspected CD battery at F 858272, as well as the two light coastal guns at F 891177, could fire on this beach or on its approaches.

(See Enemy Defense Overprint, Inclosure No. 1)

d. Interpretation of aerial photographs as of 11 December 1943 reveals the fixed defenses listed on the following table. For exact location consult Enemy Defense Overprint, Inclosure No. 1, from which the numerous unoccupied battery emplacements, mostly of Italian construction, have been omitted.

DEFENCES: ANZIO AREA

Map Sheets: 158, I, II, III, & IV

		<u>Estimated Caliber</u>
CD guns, positions occupied	2 (1 battery) (probably Italian)	75 - 88 mm
possible	8 (2 batteries)	6"
probably dummy	4 (1 battery)	
Dual Purpose guns	4 (1 battery)	88 mm
Heavy AA guns	0	
Light AA guns	17 (5 batteries)	
Pillboxes	43	
MG Emplacements	260	
Strong Points	4	
AT guns	0	

UNOCCUPIED EMPLACEMENTS:

CD guns	63 (14 batteries)
Dual Purpose guns	21 (5 batteries)
Hy AA guns	19 (5 batteries)
Lt AA guns	37 (14 batteries)

~~U. S. S. E. S. R. E. I.~~  
~~Equal, British POST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~U S S E C R E T~~  
~~Equals British MOST SECRET~~

### 3. BATTLE ORDER

a. Unit - 213th Infantry Division ( Sicherungs (Security) Division.)

- (1) Composition: 318th Infantry Regiment (Reinforced)  
345th Infantry Regiment ( Reinforced)  
213th Rcn. Company  
213th AT Company  
213th Engr Battalion  
213th Signal Battalion  
Services

- (2) History: When first mobilized as the 213th Infantry Division, the division was stationed at PRES LAU, SILESIA. The division does not seem to have had any combat experience during the first year of the war. During the winter of 1940 - 1941 the division was converted into a Sicherungs Division and as a result lost one of its original three infantry regiments (number of third infantry regiment unknown). There is no evidence indicating that the division saw any real fighting on the Russian front, but it may have been employed for the guarding of rear areas and important lines of communications. On the Russian front Sicherungs Divisions were also occasionally used for mopping up isolated enemy pockets or to fight guerillas. The division was last reported in the southern sector of the Russian front. (B-389.210-0 AFHQ, 16 November 1943. LOCATION LIST OF IDENTIFIED GERMAN FORMATIONS as of 25 October 1943.)

NOTE: No details on strength, organization, armament and equipment of Sicherungs Division formations or units are known at this time.

### 4. ENEMY CAPABILITIES.

a. The enemy capabilities given below are substituted for those given in paragraph 5, G-2 Estimate, Appendix No. 1 to Annex No. 1, to Outline Plan SHINGLE dated 22 November 1943.

(1) It is believed that the German XI Flieger Corps has the responsibility of defending the area surrounding ROME, which probably includes beach defense between the southern end of the PONTINE Marshes (M 2090) and LAGUNA DI ORPETELLO. XI Flieger Corps is expected to consist of the 3rd Panzer Grenadier Division, possibly the 213th Infantry Division (in the past this division has been used for line of communications duty), a newly activated 4th Flieger Division which could not be expected to be a very effective combat division but would have some combat value; an antitank Battalion; and 15 to 20 tanks. Even though newly activated, the 4th Flieger Division probably consists of select personnel which had received thorough replacement center training.

(2) Inasmuch as there are not very many suitable beaches along the coast in the area of XI Flieger Corps, it is estimated that the enemy will have sufficient forces to defend the beaches, which may consist of combat groups of the size of a battalion, reinforced, for likely beaches. Due to the recent arrival in the area of new units, information is not yet available as to the detailed dispositions of units available to XI Flieger Corps.

~~U S S E C R E T~~  
~~Equals British MOST SECRET~~

-4-

UNCLASSIFIED

UNCLASSIFIED

~~U. S. S. E. C. R. E. T~~  
~~Equals British Post Secret~~

(3) ANZIO and NETTUNO have in the past been used as Naval Stations and supply ports, and therefore could be expected to have reserves within supporting distance to defend them.

(4) It is estimated that during D-Day, landing could be resisted by the remainder of either the 3rd Panzer Grenadier Division or the 213th Infantry Division, depending on which division had the responsibility of defending the landing area. With a feint at some other place along the coast, other than at the point of landing, it is possible that some of the forces indicated above as being available to resist a landing, might be diverted. However, within 48 hours after the landing, provided it is clear to the enemy that no further landings in the area are taking place, it is estimated that the other division would probably be used to oppose the landing. Inasmuch as a landing in the vicinity of ROME is almost certain to cause reactions in ROME, part of the enemy force in the area will be needed to police and garrison the town. It is considered that the Flieger Division is most likely to be used in that capacity on account of its light weapons and its having had no combat experience. However, a part of the division should be considered available for employment in combat to resist a landing.

(5) In addition to the above, the 356th Infantry Division in the area north of SPEZIA and the SS Reichsfuehrer Brigade northwest of FLORENCE could each be considered available as reinforcements to resist a landing within three days from H-Hour. It is considered that the landing as planned, would be considered by the enemy as a serious threat to the rear of Tenth Army and to ROME, and, therefore, would call for emergency measures on his part to reduce the threat. Reducing such a threat must be considered by him as more important than the functions which those divisions are performing now of garrisoning and defending the areas where they are currently stationed.

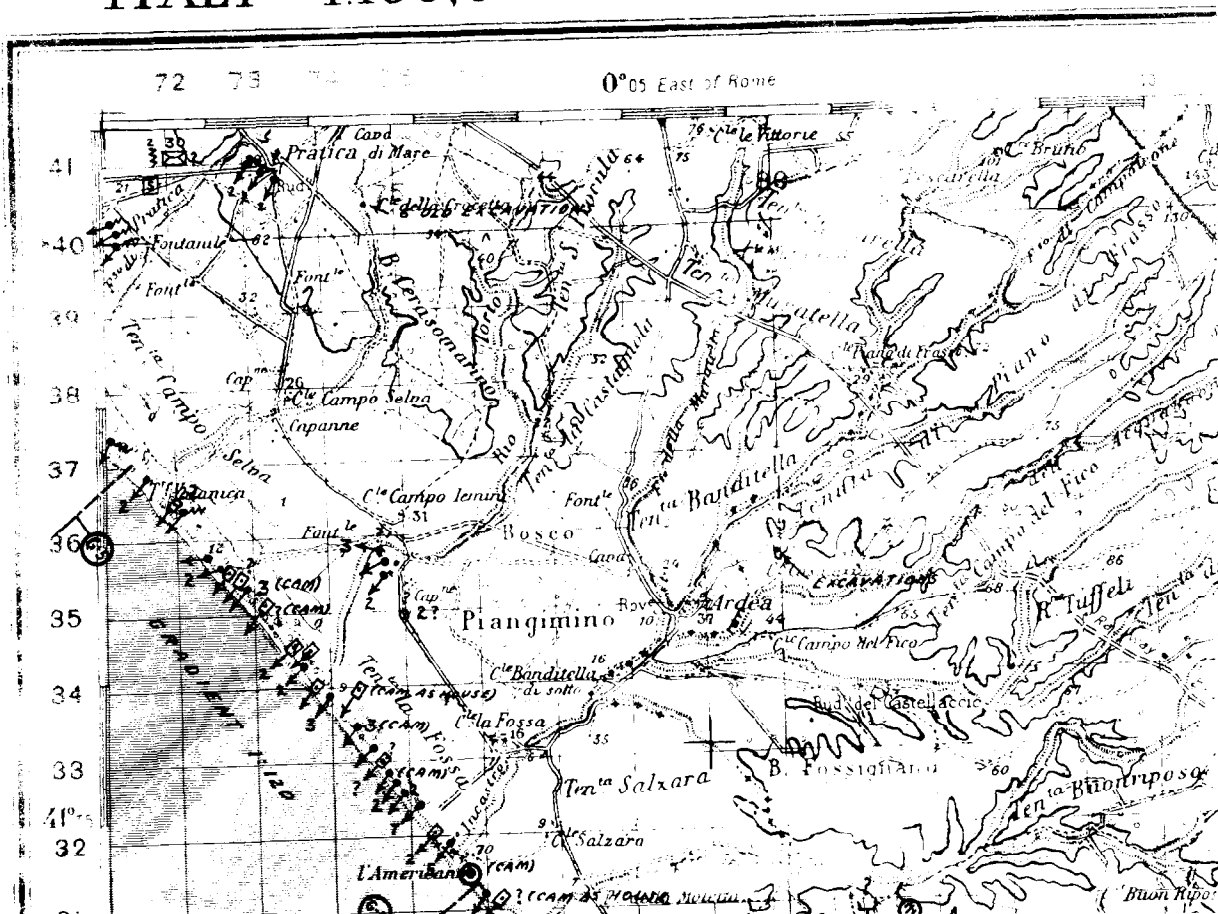
(6) It is impossible to predict the regrouping of units by the enemy which may result from the continued attacks by the Fifth and Eighth Armies. On account of the rapidly changing situation, this estimate will probably be revised frequently between now and the time of operation.

*Edwin B. Howard*  
EDWIN B. HOWARD  
Colonel, G. S. C.,  
A.C. of S., G-2

~~U. S. S. E. C. R. E. T~~  
~~Equals British Post Secret~~

UNCLASSIFIED

# ITALY 1:100,000.



Map #3

Not Digitized

UNCLASSIFIED

~~U. S. SECRET~~  
~~Equal to British MOST SECRET~~

HEADQUARTERS FIFTH ARMY  
A. P. O. #464, U. S. Army

.....  
: ~~SECRET~~ :  
: Auth: CG Fifth Army :  
: Initials: *EBH* :  
: Date: 14 Dec. 1943 :  
:.....

COPY NO. 82

SHINGLE INTELLIGENCE SUMMARY No. 2

14 December 1943

The G-2 Estimate, Appendix No. 1 to Annex No. 1 to Outline Plan, SHINGLE, dated 28 November 1943, is supplemented with the following information:

1. WEATHER. - GROUND FORCES.

a. General.

- (1) January in the ROME South area is an unfavorable period for combined military operations. It is the mid-winter month. Temperature is lowest; cloudiness considerable; moisture content high; precipitation moderate; snow a possibility; and wind movement the greatest for the year. Following three exceedingly wet months, rivers and marshes reach their highest flood stage. January more than any other month requires extra shelter, fuel, and clothing for the efficient operation of troops.
- (2) These adverse weather elements, of course, operate in the same manner to hinder the enemy. Great tactical use might be made of winter weather by an attacking force. The enemy, dependant on interior communications over a high mountain range, might be seriously impeded by a winter storm. The attacking force, operating on the milder coastal plain, might secure the advantage of superior mobility.
- (3) Despite many unfavorable elements, the ITALIAN winter is seldom severe and is of short duration. Often four to five day periods of clear skies and moderate temperatures intervene between spells of bad weather. A felicitous combination of mountains and seas protect the peninsula from the rigors of the long winter of Continental EUROPE. In comparison with other Theaters of Operation, the ITALIAN occupies a highly favored position.

b. Detail.

- (1) Temperature. January is the coldest month of the year with an average of  $44.1^{\circ}$ , two degrees lower than either other winter month. The mean daily maximum is  $52^{\circ}$  and the mean daily minimum is  $39^{\circ}$ , giving an expected daily range of only  $13^{\circ}$ . The extremes, also, are moderate. In an average year the mercury will climb to  $59^{\circ}$  on the warmest day, and will fall to  $28^{\circ}$  on the coldest. The absolute highest ever recorded in January was  $66^{\circ}$ , and the absolute lowest was  $18^{\circ}$ . Anti-freeze solutions must be on hand as an average of 4.5 days experiences temperatures below the freezing point. Conditions on the coastal plain from ROME south to GAETA will not vary much from the above figures. North along the coast and eastward into the mountains, much more severe conditions will be found. Altitude is a greater temperature control than latitude.

~~U. S. SECRET~~  
~~Equal to British MOST SECRET~~

-1-

UNCLASSIFIED

UNCLASSIFIED

~~U. S. S E C R E T~~  
~~Equals British MOST SECRET~~

- (2) Precipitation. Rainfall is moderate. Containing 8.5% of the days of the year, January receives 9% of the annual precipitation. This month represents a transitional period from the October maximum (5.16 inches) to the late winter minimum in February (2.91 inches.) The ROME South area annually receives 3.50 inches in January. Since most of the rainfall is of the showery type, great departures from the normal may be anticipated. In one January as much as 7.83 inches fell, while the driest month registered only 0.40 inches. In three out of four years the January total will fall between 1.5 and 5.0 inches.

Rain will fall on 11 days of the month, one less than the preceding months. The wettest January on record had 24 days with precipitation and the driest had only one day with measurable catch. In an ordinary year there will be from 5 to 15 rainy days. The duration of precipitation is short. In 64% of the cases surveyed wet spells lasted from one to two days; in 34% of the cases rain continued for three to six days; and in only 2% did precipitation fall on seven or more consecutive days.

Other forms of precipitation are rare. Snow will fall on only two January days in three years. The maximum depth to be expected is two inches, and the snow cover seldom lasts more than two days. To the east in the APENNINES and southeast in the Upper LIRI Valley, heavy falls and continued snow cover can be expected. Hail falls with about the same frequency as snow (0.7 days per month). One thunderstorm will occur in an average January.

- (3) Wind. The prevailing wind continues from the North, 53% of the observations being from that direction - four times as frequent as any other quadrant. Easterlies (northeast through southeast) blow 32% of the time. South is represented by 13%. West and northwest winds are seldom experienced at this time of the year. Wind velocity is at the maximum with an average of 6.8 miles per hour. The diurnal maximum comes at 1600A and the minimum in the late evening. Wind speeds, however, compared to other latitudes are relatively light. Only 18% of the observations reported velocities from 8 - 18 mph; and 7% showed speeds from 19 - 31 mph. Only one gale per month may be expected. Calms prevail about 20% of the time, usually at night. Winds along the slopes of the first range of hills will be somewhat higher and gustier than the above.
- (4) Cloudiness and Moisture. Moisture content both on the surface and aloft is high. The average humidity at 0700A is 72%, but this condition is somewhat tempered by the relative coolness of the temperature. Average cloudiness amounts to 55%, slightly less than that of December. Cloud cover is cyclical in that two or three days will produce a great amount of cloud to be followed by three or four days of almost clear skies. On the average there will be 9 clear, 17 partly cloudy, and 5 overcast days. Some sunshine may be expected almost every day. Fog and mist are infrequent with only 2-3 days observed. Ground fog is common early in the morning following a clear, cool night; this dissipates rapidly with the heating of the rising sun.

~~U. S. S E C R E T~~  
~~Equals British MOST SECRET~~

-2-

UNCLASSIFIED

UNCLASSIFIED

~~U. S. S E C R E T~~  
~~Equal to British MOST SECRET~~

- (5) Visibility. Visibility is generally good. Typical of the Mediterranean climate, objects over 50 miles distant may often be clearly distinguished. The chief limiting factors to clear vision are two: precipitation and city smoke. With the passage of a cold front attendant showers and low cloudiness may obstruct horizontal visibility to less than six miles. After a clear, calm night industrial smoke may settle over the city, leaving the outlying districts clear. The lack of fuel at the present time, however, minimizes this type obstruction. The Sirocco with its thick, dust-laden atmosphere, so common in Southern ITALY, is experienced only once a month and then in modified form.

## 2. WEATHER - AVIATION.

### a. General.

- (1) Flying weather in January, though poor, shows an improvement over the preceding months. When a high pressure cell dominates the EUROPEAN Continent, three to four days of excellent operational weather may be expected. Two to three periods of this type occur each January. At other times ceiling, visibility, and cloud coverage - the three limiting factors in tactical air support - close in to make effective cooperation between air and ground forces impossible.
- (2) Another important hindrance to air support lies in soil condition. Landing surfaces have been saturated by three months of heavy precipitation. Further rains run off and collect in low places. Rivers and marshes approach flood stage. For several days after each rainy spell, many temporary landing strips will be inoperative. Once a plane is in the air, moreover, it will find an atmospheric handicap about 50% of the time.

### b. Detail.

- (1) Sky Condition. Ceiling is the height of clouds covering more than five tenths of the sky. It is a factor of prime importance in all types of air bombardment. The development of modern anti-craft weapons has constantly raised the minimum ceiling required for successful air activity. Dive bombers need a minimum of 10,000 ft., medium bombers 10,000 - 12,000 ft; and heavies prefer the ceiling at least 20,000 ft.

Cloudiness averages 55% in January and a large amount of this is below 10,000 ft. Exact statistics on cloud heights are not available. It may be estimated that only 50% of January days will be suitable for the operation of dive bombers, while only 25% will be fit for heavies. Conditions along the coast will ordinarily be more favorable than inland. The higher mountains may be in or above the clouds, creating a distinct hazard to flying.

- (2) Visibility. The greater the visibility, the greater will be the effectiveness of air support. In general, visibilities are high in January. The chief limiting factor is precipitation and low cloudiness attending the passage of a cold front. This condition is

~~U. S. S E C R E T~~  
~~Equal to British MOST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~U. S. SECRET~~  
~~Special British Post Office~~

usually of brief duration. Haze levels which limit vertical visibility will form two or three times a month and persist for several days. They may be expected after a series of clear, relatively calm days such as accompany a high pressure cell. In general, visibilities are at a minimum at dawn and will improve throughout the day unless there is a frontal disturbance in the vicinity. In January at 0700A fifteen days will have visibilities six miles or below.

- (3) Icing. The general icing level averages 6,500 feet in January, the lowest for the year. With an outbreak of cold continental air, the critical level may fall as low as 4,000 feet. Both clear and rime icing conditions may be expected in low clouds two or three times. The proximity of the warm MEDITERRANEAN offers a handy refuge to a plane beset by icing conditions.
- (4) Winds Aloft. Upper winds are subject to sudden changes. The lowest levels even in winter show the effect of topography and of the land and sea effect. Above 3,000 feet the winds respond to the rapidly changing cyclonic circulation of the MEDITERRANEAN. With poor weather upper winds will blow from the southeast through southwest. With good weather in the ROME South area north through east winds prevail. Velocities are moderate; speeds above 40 mph are infrequent.
- (5) Almanac.

~~U. S. SECRET~~  
~~Special British Post Office~~

UNCLASSIFIED



UNCLASSIFIED

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

## Daily Almanac - January 1944

ROME 42 00 N, 12 30 E

<u>Month</u>		<u>Sunrise</u>	<u>Sunset</u>	<u>Moonrise</u>	<u>Moonset</u>	
January	1	0738	1649	1132	2316	
	2	0738	1649	1203	-----	FIRST QUARTER
	3	0738	1650	1234	0024	
	4	0738	1651	1305	0133	
	5	0738	1652	1337	0238	
	6	0738	1653	1411	0342	
	7	0738	1654	1450	0446	
	8	0738	1655	1533	0544	
	9	0738	1656	1620	0638	
	10	0738	1657	1712	0730	FULL MOON
	11	0738	1658	1807	0814	
	12	0738	1659	1903	0854	
	13	0737	1700	2001	0928	
	14	0737	1701	2059	0958	
	15	0736	1702	2157	1016	
	16	0736	1703	2256	1053	
	17	0736	1704	2355	1119	
	18	0735	1705	-----	1146	LAST QUARTER
	19	0735	1707	0057	1215	
	20	0734	1708	0159	1247	
	21	0734	1709	0259	1326	
	22	0733	1710	0411	1409	
	23	0733	1711	0518	1501	
	24	0732	1712	0621	1603	
	25	0732	1713	0718	1713	NEW MOON
	26	0731	1715	0809	1827	
	27	0730	1716	0852	1944	
	28	0729	1717	0930	2059	
	29	0728	1718	1004	2212	
	30	0728	1719	1037	2322	
	31	0727	1721	1107	-----	

All times are "A" Army Time for Central European Zone. (15° East Longitude).  
 Compiled from the Berliner Astronomisches Jahrbuch.)

Source: Air Forces Weather Station, 12 Weather Region, Mobile Unit No. 12).

*Edwin B. Howard*  
 EDWIN B. HOWARD,  
 Colonel, G. S. C.,  
 A. C. of S., G-2

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~U. S. SECRET~~  
~~Receives British MOST SECRET~~  
HEADQUARTERS FIFTH ARMY  
A. P. O. #464, U. S. Army

.....  
: ~~SECRET~~ :  
: Auth: CG Fifth Army :  
: Initials: 61177 :  
: Date: 3 December 1943 :  
:.....

COPY NO. 82

SHINGLE INTELLIGENCE SUMMARY NO. 1

3 December 1943

The G-2 Estimate, Appendix No. 1 to Annex No. 1 To Outline Plan, SHINGLE, dated 28 November 1943, is supplemented with the following information:

1. SPECIAL REPORT - F. ASTURA.

a. General: F. ASTURA from the coast to a point 158/11/953203 consists of a network of parallel drainage canals. At the coast the wet gap is 95 feet in width and this decreases as the stream goes inland and branches into tributaries. This area appears to be a low marshy area probably covered with water in the wet season.

From point 158/11/953203 following F. ASTURA and Fso di SPACCASASSI the stream has very little, if any, water in its channel. (October 15) It consists of a V shaped gully from 40 to 70 feet in width and about 15 feet deep. To make crossing possible it would require several hours of bulldozing.

F. ASTURA is an obstacle and would prevent the deployment of armour if the bridges were destroyed up to point 158/IV/917330. From here on up stream it is an obstacle but is more easily overcome.

b. Details: Bridges that would have to be destroyed.

- (1) 158/11/976140 Bridge destroyed 95 ft. wet gap.
- (2) 158/11/966171 Bridge 160 ft long and 15 ft high.
- (3) 158/11/987175 Bridge 80 ft long and 8 ft high.
- (4) 158/11/959191 Bridge 120 ft long and 15 ft high.
- (5) 158/11/969225 Bridge 50 ft long and 15 ft high.
- (6) 158/11/968225 Bridge 20 ft long and 5 ft high.
- (7) 158/11/962241 Bridge 60 ft long and 15 ft high.
- (8) 158/11/945258 Bridge 40 ft long and 10 ft high.
- (9) 158/11/939268 Bridge (?) (Poor cover)
- (10) 158/11/929288 Bridge 40 ft long and 15 ft high.
- (11) 158/IV/916293 Bridge 65 ft long and 15 ft high.
- (12) 158/IV/915309 Bridge 65 ft long and 15 ft high.
- (13) 158/IV/915235 Bridge 50 ft long and 15 ft high.
- (14) 158/IV/917330 Bridge 70 ft long and 15 ft high.

Fso FEMINAMORTA would present an obstacle similar in proportion to the F. ASTURA.

2. SPECIAL REPORT ON CANALE MUSSOLINI.

a. General. At the mouth of the canal it is 200 feet wide, 30 feet deep, with a wet gap of 40 feet. It narrows to 170 feet in width, 16 feet in depth, and has a wet gap of 8 feet at the point 158/11/069285.

~~U. S. SECRET~~  
~~Receives British MOST SECRET~~

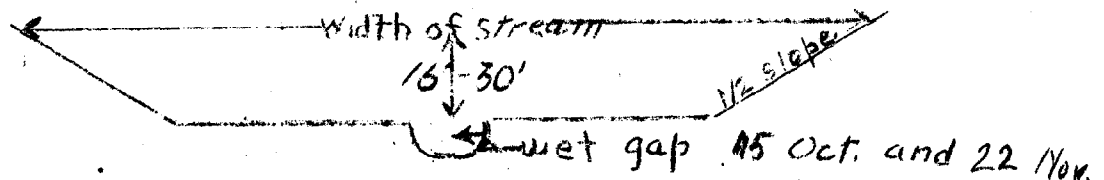
-1-

UNCLASSIFIED

UNCLASSIFIED

~~U. S. S. E. C. R. E. T~~  
~~Equal to British MOST SECRET~~

Cross Section of Canal.



NOTE: Wet gap probably covers all the bottom after large rains.

Numerous concrete, apron like, check dams occur on the canal. The length of these is about 150 ft and they conform to the slope of the banks with the wet gap at the bottom. They may possibly be used as crossings by bridging or fording the small channel.

The terrain bordering the canal is cut by a complete network of smaller drainage canals or ditches that would limit or even prevent the deployment of armored vehicles especially during wet conditions.

b. Details: Bridges.

- (1) 158/11/008131 Bridge blown, gap 40 ft long. Canal 200 ft wide and 30 ft deep with a wet gap of 40 ft in width.
- (2) 158/11/011147 Bridge 200 ft long and 30 ft high. Wet gap 40 ft wide.
- (3) 158/11/007183 Bridge 200 ft long and 16 ft high. Wet gap 35 ft wide.
- (4) 158/11/025217 Bridge 200 ft long and 16 ft high. Wet gap 20 ft wide.
- (5) 158/11/025218 Bridge 160 ft long and 16 ft high. Wet gap 20 ft wide.
- (6) 158/1/030237 Bridge 245 ft long and 16 ft high. Canal 175 ft wide with wet gap of 8 ft in width.
- (7) 158/1/041250 Bridge 230 ft long and 16 ft high. Wet gap 8 ft wide.
- (8) 158/1/049259 Bridge 165 ft long and 16 ft high. Wet gap 8 ft wide.
- (9) 158/1/064279 Bridge 165 ft long and 16 ft high. Wet gap 8 ft wide.
- (10) 158/1/069284 Bridge 165 ft long and 16 ft high. Wet gap 8 ft wide.

3. CANAL FROM F. ASTURA TO CANALE MUSSOLINI.

a. General: This canal is 120 feet wide and 16 feet deep. The banks have 1/2 slope and a wet channel of 14 feet in width. It has the same shape and characteristics as Canale Mussolini.

~~U. S. S. E. C. R. E. T~~  
~~Equal to British MOST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

b. Details: Bridges..

- (1) 158/1/029237 Bridge 160 ft long and 16 ft high. Water gap 14 ft wide
- (2) 158/1/015240 Bridge 120 ft long and 16 ft high. Water gap 14 ft wide
- (3) 158/1/008245 Bridge 160 ft long and 16 ft high. Water gap 14 ft wide.
- (4) 158/1/991252 Bridge 160 ft long and 16 ft high. Water gap 14 ft wide
- (5) 158/1/982253 Bridge 200 ft long and 16 ft high. Water gap 14 ft wide.
- (6) 158/1/972252 Bridge 120 ft long and 16 ft high. Water gap 14 ft wide.
- (7) 158/1/951278 Bridge 120 ft long and 16 ft high. Water gap 14 ft wide.
- (8) 158/1/941279 Bridge 120 ft long and 16 ft high. Water gap 14 ft wide.

*Edwin Howard*  
EDWIN F. HOWARD,  
Colonel, G.S.C.  
A.C. of S., G-2

2 Incls:

- Incl. No. 1 - Reconnaissance Report P.V.P.
- Incl. No. 2 - Reconnaissance Report P.V.Q.

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~U. S. SECRET~~  
~~Equally British MOST SECRET~~

OPERATION P. W. P.

Beach Reconnaissance.

INTRODUCTION.

1. Method and Results. One Sortie was made with 3 folboats from Italian Motor Silurante 52, to carry out offshore reconnaissance one half (1/2) mile either side of position 41°26' N 12°43.5' E. Party consisted of 1 Unit COPP, Sub-Lieutenant K. G. Patterson with AB G. D. Lockhead, and 2 Units Special Boat Section, Captain A. R. McClair with Sergeant R. Sidlow, and Captain W. G. Davis, with C.S.M. J. Galloway. Landfall was made 1700 yards to SE of intended position. This was identified by two conspicuous towers "X" and "Y" as shown on Diagram. Long D.R. run from PONTINE ISLANDS made accurate landfall difficult. TORRE ASTURA was clearly recognizable for at least 3 miles to seaward. CAPE ANZIO was also visible at about 4 miles. Accurate fixing would be greatly facilitated by use of R.D.F. or Radar as fitted in LCT(R).

Reconnaissance was carried out as detailed in Reconnaissance Plan (Appendix "A") with alterations as shown in individual reports attached. The positions of soundings were not as planned, however, owing to difference in landfall position, but all have been identified from photographs and have been plotted.

Canoes left MS 52 at 2330 and last one returned at 0220.

2. Alterations and Suggestions to Plan. Radar as in LCT(R) would be only definite means of finding beach accurately. S/M Beacons could be laid or markers in folboats would greatly assist landing.

3. Weather Sets, Sea, etc. No sets noticed. Wind was very light and offshore. Swell became evident about 300 yards to seaward, breaking into 2 foot surf about 30 yards offshore. Visibility 5 miles.

4. Enemy Vigilance Lights, etc. There was no evidence of enemy activity or patrols, but at SE end of area covered, lights were noticed several times, just above the beach.

5. Chances of Compromise. Neither the reconnaissance party nor the M.S. lying offshore was detected, to the best of our knowledge and belief.

6. Beach Report. Beach appears to be narrow, with steep bank at the back, which occasionally comes right out to the water's edge.

Under water, there appears to be a false beach with 1 to 2 feet over it about 25 yards offshore along most of the beach with maximum depth of 4 feet inside it. About 150 yards out there is a bar with 10 to 11 feet over it and depth of 12 feet inside it at the NW end of the beach. This bar is not in evidence at SE end.

Patches of rock occur along the beach especially at foot of bank when it comes to water's edge, where pinnacles show above water up to 15 yards offshore.

For further detailed information and beach gradients at places where lines of soundings were taken, see individual reports attached, and also marked diagram of coast.

~~U. S. SECRET~~  
~~Equally British MOST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~U. S. S. E. C. R. E. T.~~  
~~Equal British MOST SECRET~~

References are Sub. Lieutenant Patterson - Soundings 1

Captain McClair - Soundings 2

Captain Davis - Soundings 3

Tower, S.E. X

Tower, N.W. Y

Landfall Mark ashore L

K. G. Patterson,  
Sub-Lieutenant, R.A.N.V.R.

APPENDIX A

Extract from Operational Plan P. W. P.

Reconnaissance Plan. Three Canoes will be used, leaving the parent ship independently and making for the shore on a prismatic compass course at right angles to the beach. When a good landfall has been made and identified the canoes will act as follows:--

No. 1 - Will turn 90° to port and paddle along the beach for 1/2 a mile and commence sounding.

No. 3 - Will turn 90° to starboard and follow same procedure as 1.

No. 2 - Will proceed to take two lines of soundings 1/2 mile apart, each 1/4 mile either side of the landfall position. On completion of lines of soundings, canoes will return independently to position of landfall and thence to parent ship on a reciprocal course to the run in.

~~U. S. S. E. C. R. E. T.~~  
~~Equal British MOST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~U.S. SECRET~~  
~~RECONNAISSANCE REPORT - BEACH F.I.A.~~  
~~SECRET~~

RECONNAISSANCE REPORT - BEACH F.I.A.

OPERATION P.W.P.

.....  
: ~~SECRET~~ :  
: Auth: CG Fifth Army: :  
: Initials: J.C. :  
: Date: 2 Dec 1943 :  
:.....

On Night of Sunday, 28th/29th November.

Canoe No. 1. Sub-Lieutenant K. G. Patterson, R.A.N.V.R. and A.B. G.D. Lockhead;  
COPP ME 2.

For lettered references, see diagram.

Narrative 2330 Canoe launched from M.S.52. Proceeded inshore on Canoe 035° mag.  
2342 Saw light flashing on beach about green 45.  
2345 Altered course 80° to port. Noted prominent bushes on shore in position (I). Commenced to paddle out to sounding position.  
2354 Saw very bright light in sky like Verrey's light, but disregarded as it was falling and left no smoke trail. Light was to seaward in approximate position of M.S.52.  
2355 Sighted tower on top of rise. Paddled on until abeam.  
0001 Tower abeam. Assumed this to be tower marked (Y) as no information had been given about tower (X), which was not shown on oblique. Therefore assumed landfall to be too far S.E. and continued on until 0020 instead of 0010 to get further along beach to planned sounding position.  
0020 Turned 80° to starboard and proceeded inshore. Struck bad patch of surf and had to retire seawards again and came in further to S.E. Turned about 150 yards offshore and came in astern. Found beach edged with sharp rocks. (Sharp rocks mentioned were on N.W. side of small bay where small valley (and stream?) ran down to sea), so worked over to N.W. and found clear patch of beach; but surf was breaking occasionally so proceeded to sea through surf. Decided that soundings could not be attempted from boat; therefore Sub-Lieutenant Patterson swam and waded in from about 60 yards off and planted stake in hard sand, with scattered rocks, under low rocky bluff about 20 - 30 feet high rising almost right from water's edge. Fairly steep. Noted blockhouse at top of bluff right above, but could see no signs of sentries or any activity ashore. Bottom inshore changed from sand to irregular sharp rocks at and near water's edge. Then waded seawards across inshore channel of maximum depth 4 feet on to false beach, maximum depth 18" to 2 feet, of hard sand. Ceased hand sounding 30 yards out in 4 feet as false beach shelved, and swam out to canoe lying about 100 yards offshore. Climbed aboard and reeled back to 30 yard mark and commenced sounding to seaward. Bottom shelved regularly to 12 feet at 70 yards, then remained at 12 feet until 130 yards where it shoaled suddenly to 10½ feet then at 160 yards commenced to shelve slowly and regularly. At 170 yards (12½ feet) end of line was reached and line was reeled in, some difficulty being experienced in pulling out the spike. Then proceeded back to depth of 10½ feet and proceeded slowly sea again, sounding at intervals of approximately 10 yards. Bottom, as found previously, shelved regularly and soundings were carried on until 18 feet was obtained at about 210 yards from shore. This showed that the bar, whose presence was suspected about 150 yards offshore, is there, and that the maximum depth of water over it in places sounded was 10½ feet.

~~U.S. SECRET~~  
~~Equals British SECRET~~

UNCLASSIFIED

~~U. S. S. E. S. E. T~~  
~~Equal British MOST SECRET~~

0142 Started back to S.E. parallel to beach about 220 yards out.  
0154 Tower X abeam.  
0205 Altered course 80° to starboard on picking up position (L) and immediately picked up M.S.52 with binoculars right ahead. Homed without flashing.  
0225 Canoe hoisted inboard.

-----

#### CONCLUSIONS AND REMARKS

1. Soundings in surf are extremely difficult and hazardous and only excellent handling of canoe by A.B. Lockhead saved its being swamped several times. In these conditions it was found more efficient to swim in from just outside surf, and sound back along line swimming or wading. R.A.F. jacket type Mac Wests were found very satisfactory.

2. Improvised beach gradient line gear was found to be satisfactory. (Reel made fixture in canoe).

3. It will be seen from the fact that Tower (X) was assumed to be Tower (Y) (as Tower (X) was not shown on obliques) that it is absolutely essential that unbroken, continuous oblique photographs of actual area and some distance either side, be provided beforehand. Very often quite conspicuous objects in obliques cannot be seen from Verticals.

4. From study of photographs and charts afterwards, it was found that the landfall position (L) was approximately 1700 yards to S.E. of intended position in centre of beach.

It was also confirmed that the line of soundings was in position marked (1), from study of photographs, and the fact that in this position there was little or no beach, and shore rises abruptly and that there was a blockhouse in same position as seen. Also from relative position of tower which was seen slightly inshore and some way to N.W. whilst sounding, which fits in exactly with tower (Y). Position by D.R. based on turn on making landfall also corresponds. Silhouette as seen, with small indentation or bay to S.E. also corresponds.

5. Night was very clear and starlit and visibility was excellent. Range of mountains inland could be seen. There was no moon and very little cloud. Slight offshore breeze causing drift to S.W. Swell was noticed commencing about 300 yards out, steepening to about a 2 foot surf inshore, but still suitable for minor landing craft.

6. Landing Craft landfall could be made on Tower (X) which is between two large clumps of bushes and silhouetted almost in the V between two large hills in the distance, when seen bearing 045°, i.e. at 90° to beach. Tower cannot be seen from west (i.e. close in from position of soundings). See diagram.

7. Beach bottom (but not this particular section of beach owing to lack of good exit) would make beach suitable for all L.C. up to L.C.T. and possibly deeper patches over outer bar could be found for L.S.T.

~~U. S. S. E. S. E. T~~  
~~Equal British MOST SECRET~~

UNCLASSIFIED



UNCLASSIFIED

~~U.S. SECRET~~  
~~Equals British MOST SECRET~~

8. Any onshore wind would cause unpleasant swell and make landing very hazardous.

9. Rocks found in this section of beach do not appear to be present all along the beach, but only in patches.

10. A.B. Lockhead's management of and behaviour in the canoe was excellent throughout.

11. There appeared to be no activity ashore or any signs of anybody on this section of beach, although from lights seen off beach to S.E. there may be activity there. There were no underwater defences noticed.

12. Blockhouse can be seen for at least 1/4 mile offshore and probably more.

13. Tower (Y) can be seen from south, but whether from seaward is not known.

14. Cape Anzio and especially Torre Astura could be seen clearly and could, if line of approach from release position was correct, be used as time check by L/C.

15. Troops would have to wade up to 4 feet, and vehicles would have to be waterproofed.

16. Lieutenant Simpson Jones was most helpful and managed the whole operation most efficiently. Also the officers and crew of M.S. 52 were excellent throughout, and M.S. boats are most effective for this type of job.

17. As there was no alarm or activity ashore, it is considered that the operation was undetected by the enemy.

(signed) K. G. Patterson,  
Sub-Lieutenant, R.A.N.V.R.

~~U.S. SECRET~~  
~~Equals British MOST SECRET~~

~~U. S. SECRET~~  
~~Equal British MOST SECRET~~  
 OPERATION P. W. P.

Report on Reconnaissance by Captain A. R. McClair, Z. Special Boat Section (N. A.)

On the night of 28/29 November 1943, I made a reconnaissance of a section of Beach F.I.A., Map Sheet 158 II, Italy.

With Sgt. R. Sidlow, Special Boat Section, as my partner, our folboat was slipped from M.S. 52 at 2330 hours and we proceeded inshore on a course of 035° (magnetic). There was a slight offshore wind and the sea was calm.

2340. Noticed signs of a swell, which increased as we got nearer the shore. Could hear surf plainly from 400 yards off shore. Saw light, possibly a torch, flashing inshore on starboard bow.
2348. Made landfall at point 946143, and identified it by a prominent bush between two larger clumps of bushes. Turned to port and paddled parallel to coast, about 50 yards offshore.
2350. Passed small jetty or long straight rock jutting out from shore at mouth of stream (point 945144). Later decided to be rock.
2353. Turned inshore, stern first, and went to water's edge. In spite of calm weather, there was a difficult surf, and once the folboat was nearly swamped. Found sea bottom undulating in depth, but this was investigated more fully later. Commenced taking soundings.
2355. Saw very bright white light falling through sky. At the time I was convinced that this was a white very light, fired from M.S.52, being the signal that the operation was compromised and that M.S.52 was in such danger that it was obliged to abandon us. As I had seen or heard nothing to bear out such circumstances, I decided to find out if the M.S. was still in position. Put to sea and later on sighted her at a distance of 400 yards (estimated), so returned to the point where we had commenced soundings. On the way in, I sighted folboat No. 3 (Capt. Davis) returning to the M.S., about 200 yards on my starboard beam. For a period before and after this time, I omitted to note the times of events.
- I decided, owing to the undulating sea bottom and the difficulty of handling the folboat in the rather heavy surf at this point, to describe the first 50 yards offshore as best I could, and to commence soundings proper at a distance of 50 yards offshore. I took soundings for a further 200 yards offshore, thus obtaining information over a total distance of 250 yards from the water's edge. This information is tabulated separately.
0115. Having completed this line of soundings, my antenna reel, unfortunately, became badly fouled while reeling in, mainly due to the motion caused by the swell. It was quite impossible to attempt the second line of soundings which I should have done, so I went close inshore and spent some time collecting further information about the depths inside the surf, and general information about the adjacent beach.
0125. Returned to original landfall, and set course on reciprocal bearing of the course in.
0145. Re-embarked on M.S.52.

Remarks and Conclusions.

- (1) I saw another light flashing on shore several hundred yards to N.W. about 0045. Sgt. Sidlow also thought he saw someone smoking on shore, not very close to us. There were no signs however that we had been seen, and my personal

~~U. S. SECRET~~  
~~Equal British MOST SECRET~~

UNCLASSIFIED

~~U. S. SECRET~~  
~~Excluded British VOST SECRET~~

opinion is that more care would have been taken by anyone ashore if our presence had been suspected.

(2) Sea bottom close inshore was mostly sand, with a few harder patches which may have been rock covered by a thin layer of sand.

(3) Saw what looked like a small building about 350 yards S.E. of the "jetty" at what I judged to be the beginning of the rocky stretch beyond the S.E. end of the beach.

(4) The only objects which could be identified more than 100 yards to seaward were the beginning of the rising ground at pt. 950139, and the Torre Astura, which could be plainly seen. The Anzio peninsula was also just visible. The "jetty" is not visible for more than 30 or 40 yards.

(5) The conditions close inshore were very bad, in view of the fact that it was a calm night with very little wind. The information close inshore was only made possible by the skilful handling of the folboat by Sgt. Sidlow, who had to control it on his own while I was otherwise occupied. Any onshore wind, would, I feel sure, create difficult conditions for all types of craft.

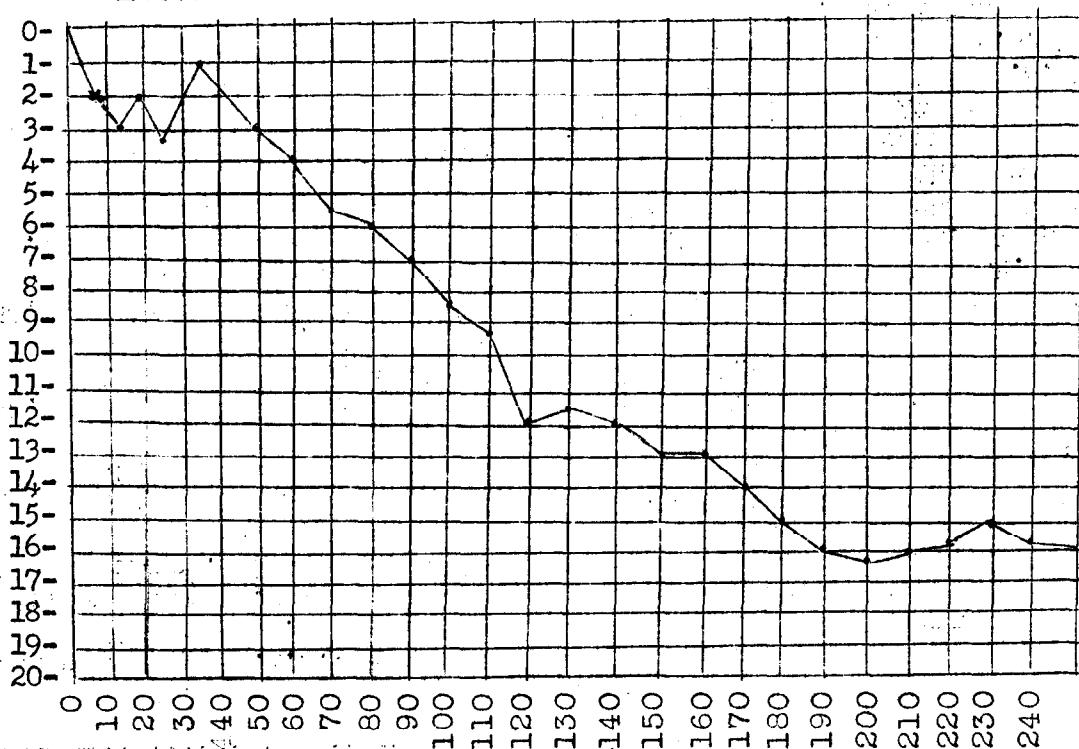
(6) Visibility was good, the night being moonless, but well starlit with little cloud.

(7) No swell was noticed until about 300 yards offshore, after which it increased until it broke into surf about 40 yards off shore.

(8) Apart from the "jetty" already mentioned, which may have been rock, I located no other rocks in the area covered.

(9) Apart from the irregular bottom within 50 yards of the shore, there appears to be no other sand bar on shoal farther out at this point.

Graph of Beach Gradient.



Distance offshore in yards.  
Scale: Depth - 1/10" to 1 ft. ) Thus the gradient as shown above is  
Distance - 2/10" to 1 yard ) an exaggeration by one third.

UNCLASSIFIED

UNCLASSIFIED

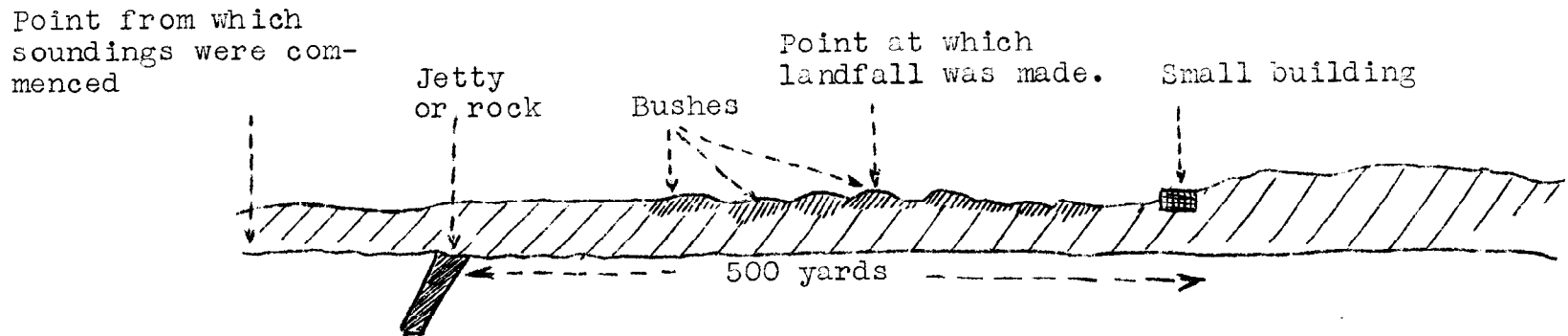
~~U. S. SECRET~~  
~~Equals British Most Secret~~

Table of Soundings

Distance off shore in yds	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240
Depth in feet	3'	4'	5'6"	6'	7'	8'6"	9'6"	12'	11'6"	12'	13'	13'	14'	15'	16'	16'3"	16'	15'9"	15'	15'6"

The above table is self explanatory but it may be worth noting that although there are no bars, there is a shelf a bout 12' deep between 120 and 140 yards offshore, and another shelf just less than 16' deep between 210 and 240 yards offshore. Within 50 yards of the shore, the bottom undulates sharply, the general average getting gradually shallower. In particular I noted a depth of 1' about 35 yards offshore, while a few yards inside that I obtained a sounding of 3'6". I regret that owing to the surf it was not possible to get a complete picture of this condition, but it would certainly create rough going for any vehicles attempting a landing.

Panorama of Coast as seen from 400 yards to Seaward.



The coast appears to form a low bank or escarpment immediately behind a narrow beach. The low jetty is not actually visible at this distance, but is added to this panorama to show its position in relation to the surroundings. The small building only appears as a dark patch and cannot be identified as a building until closer inshore.

(signed) A.R. McClair Capt.  
Z Special Boat Section (N.A.)

~~U. S. SECRET~~  
~~Equals British Most Secret~~

UNCLASSIFIED

UNCLASSIFIED

~~U. S. S. E. C. R. E. T~~  
~~Equal to British MOST SECRET~~

RECONNAISSANCE REPORT BEACH F-1-a

OPERATION "P.W.P."

Night 28/29th. November 1943.

Visibility good. All bearing Magnetic.

Captain Davis, W.G.  
C.S.M. Galloway  
28th-29th November 1943.

We, C.S.M. Galloway and self were detailed to carry out a reconnaissance and soundings at position 3 which was North of rocks and South of proposed landing beach.

We left M/S 52 at 2330 hours and steamed a course 035° magnetic for 15 minutes.

- 0342 Light was observed in direction of land and on our course.
- 2345 Altered course to starboard 90°(125°) continued on this course for 7 minutes during which time we considered we were too far South observing what appeared to be surf breaking on rocks.
- 2352 Altered course to 035° and approached land continuing on this course for 15 minutes. Lights were observed at a point slightly to starboard of where we intended to take our soundings. These took the form of two flashes which might have been matches being struck. No lights were again seen during the operations.

We took a sounding when our boat was affected by surf. There was six feet of water. This was some 130 yards from shore. We proceeded towards land for some 30 yards and again took a sounding, there being four feet of water at this point.

- 0007 (Captain Davis personal) Visibility being good and there appearing to be signs of life ashore (Lights previously mentioned) also the fact that there was a surf running, decided me to leave the boat and wade ashore. I kept on all my clothes except boots and socks. Took the sounding line and proceeded towards the shore. The bottom was rocky and varying in depth from 3 to 6 feet up to 20 yards from shore. The rocks were covered with sea urchin which gave me a lot of trouble.

When some 5 yards from the waters edge I walked 15 yards North and planted the stake of the distance line and proceeded to sea to rejoin the boat which could not now be seen from the shore.

The soundings I took on my return journey were as follows:--

<u>Distance from Shore</u>	<u>Depth</u>	<u>Remarks</u>
Yd.		
10	2 ft	Sandy
20	2 ft 6 in	Sand and Stone
30	3 ft 6 in	Sand and Stone
40	5 ft 0 in	Sand and Stone
50	4 ft 6 in	Rock
60	4 ft 0 in	Sand and Rock
70	4 ft 0 in	Sand and Rock
80	6 ft 0 in	Sand and Shingle

~~U. S. S. E. C. R. E. T~~  
~~Equal to British MOST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~U. S. S. E. S. R. E. T~~  
~~Equals British MOST SECRET~~

I did not take any further soundings as the information I had gained from those already taken was that this part of the beach was useless for landing craft of any type. I should mention, however, that rocks came to within 3 feet of the surface at points between the 30 and 60 yard line.

The water was over 6 feet deep for the remainder of the distance to the boat which was now lying, having drifted, some 200 yards off shore.

I climbed aboard at 0040 hours 29.11.43, having spent 33 minutes in the water.

Knowing that McClair was taking soundings some 400 yards North of our position, I decided to pull in the distance lines and return to the M.S. where we finally arrived at 0120 hours.

The map reference of the spot from which we took our soundings was 948142, Sheet 158 II. This position is easily recognizable in the photographs which we studied before leaving and both C.S.M. Galloway and I are confident that we could again find the position.

Signed W. G. DAVIS,  
Capt. R.A.(SBS)

For GALLOWAY, C.S.M.  
R.A. (S.B.S.)

~~U. S. S. E. S. R. E. T~~  
~~Equals British MOST SECRET~~  
-2-

UNCLASSIFIED

~~U. S. S. E. S. R. E. T~~  
~~Equals British MOST SECRET~~

UNCLASSIFIED

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

OPERATION P. W. P.  
Beach Reconnaissance Report: Beach F-1-a, on night 28/29th November 1943.  
DISTRIBUTION:--

Commander in Chief, Mediterranean	1 copy
Commander Naval Forces, North African Waters	1 copy
Commander Naval Task Force No. 81	1 copy
Flag Officer Western ITALY	5 copies
Senior Naval Officer Advanced Landings (W)	1 copy
G-2 Fifth Army Hq	5 copies
Allied Force Hq	1 copy

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

UNCLASSIFIED

NOTE: NO ROCKS WERE ENCOUNTERED  
BY RGN. PARTY. ROCKS SHOWN ON  
DIAGRAM ARE TAKEN FROM PHOTOGRAPH

N.W. LIMIT OF BEACH  
G 3A

TORRE  
ANASTASIA  
(NOT SEEN)



PHS.

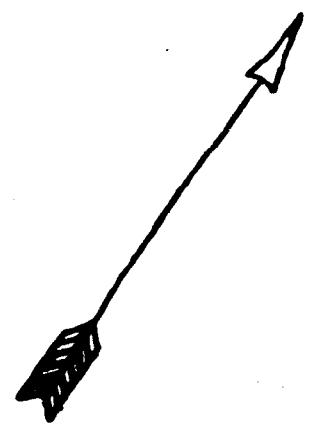
CAPT. MCCLAIR

RCN.  
②

S.E. LIMIT OF BEACH G 3A

PATTERSON LAST  
SEEN IN THIS AREA

N



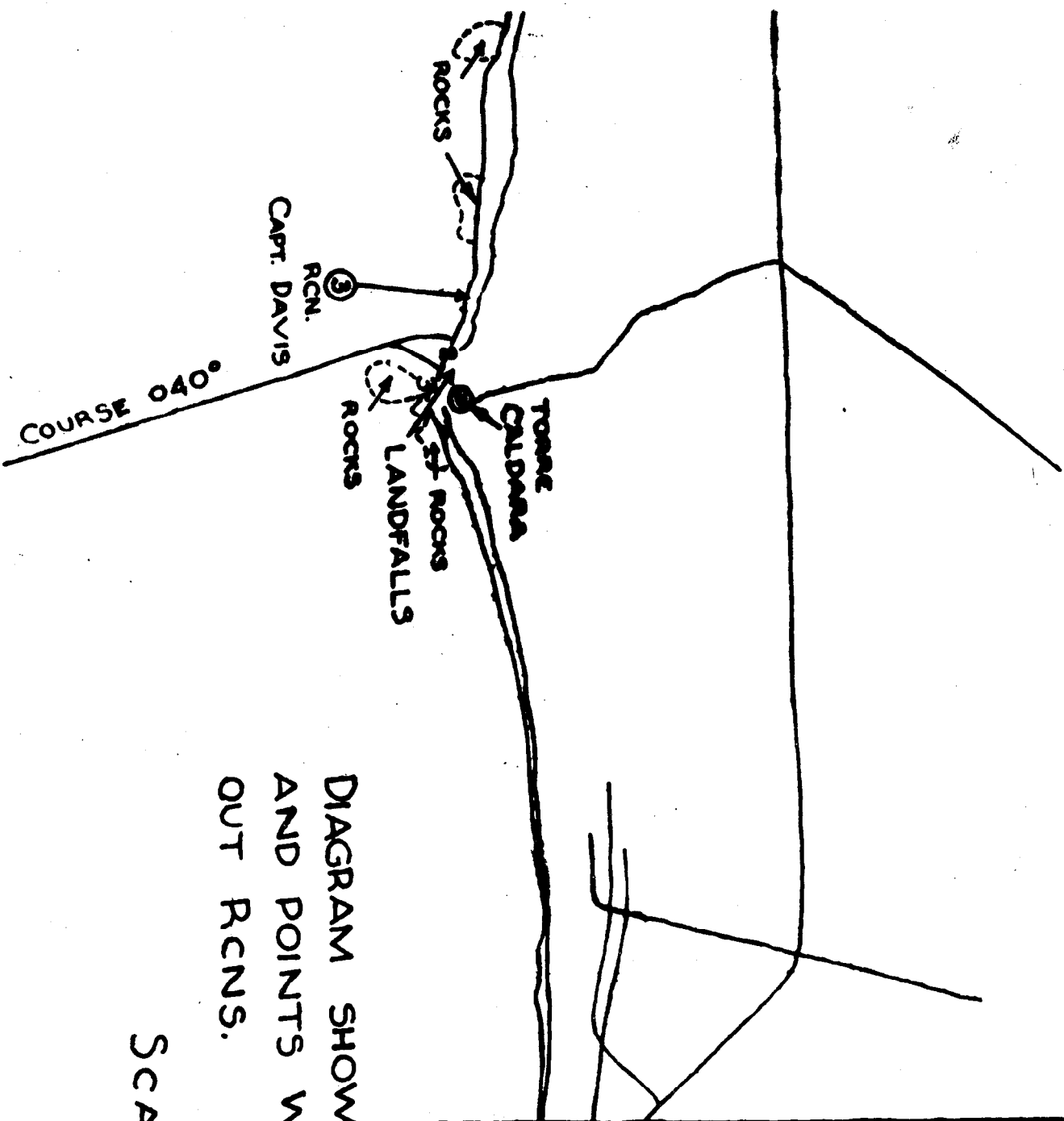
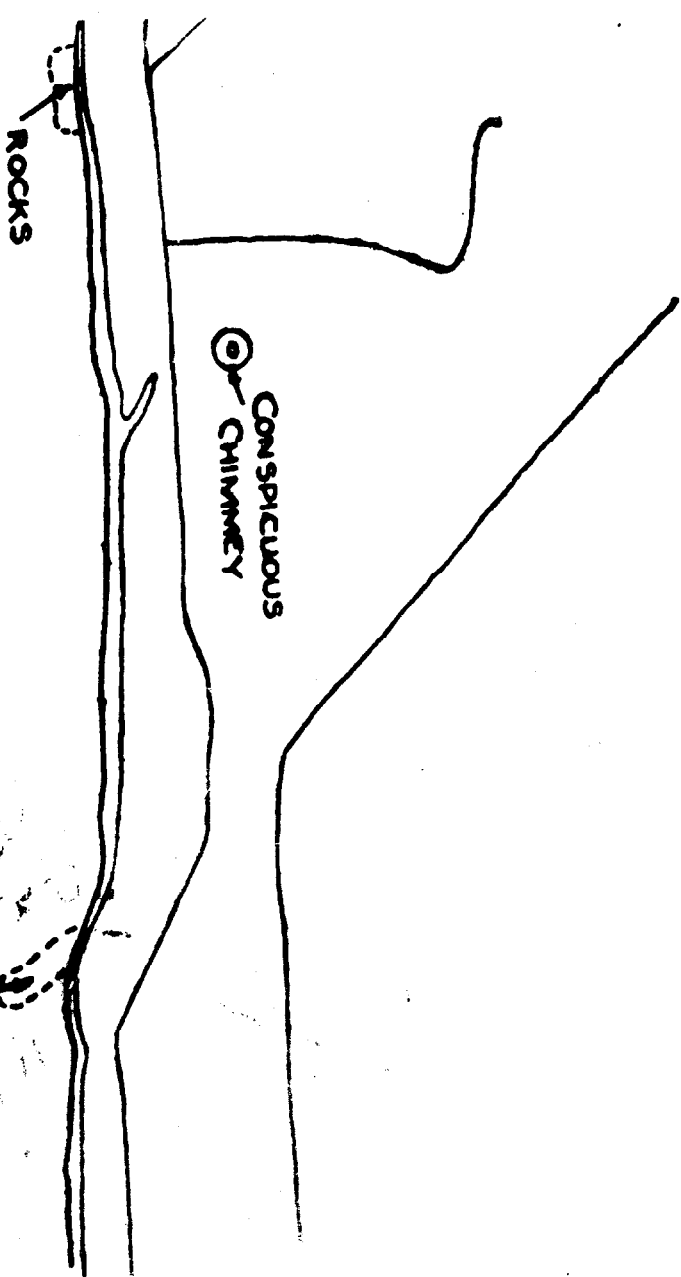


DIAGRAM SHOW  
AND POINTS V  
OUT RCNS.

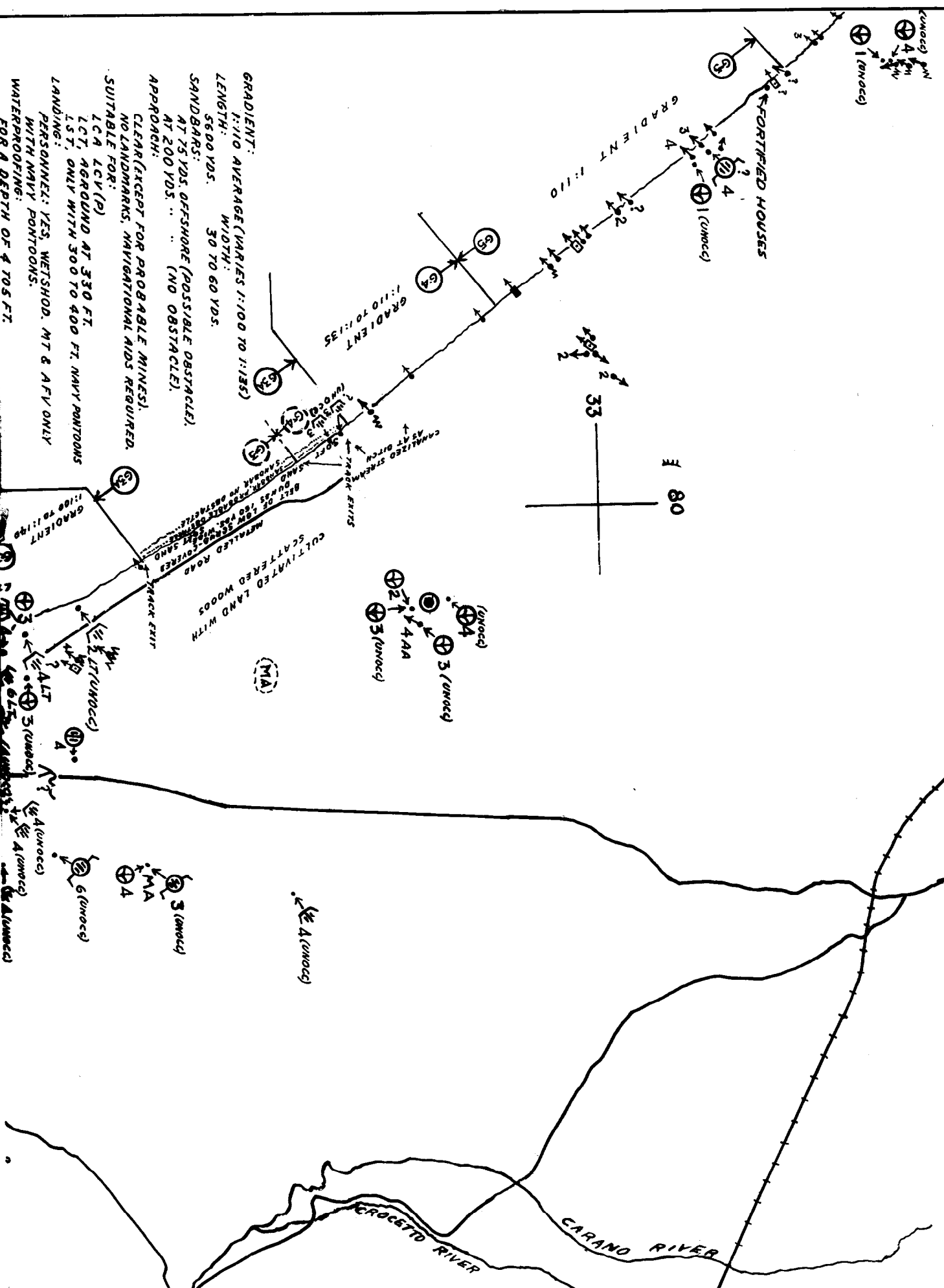
SCA



ING APPROXIMATE COURSE  
HERE FOLBOATS CARRIED

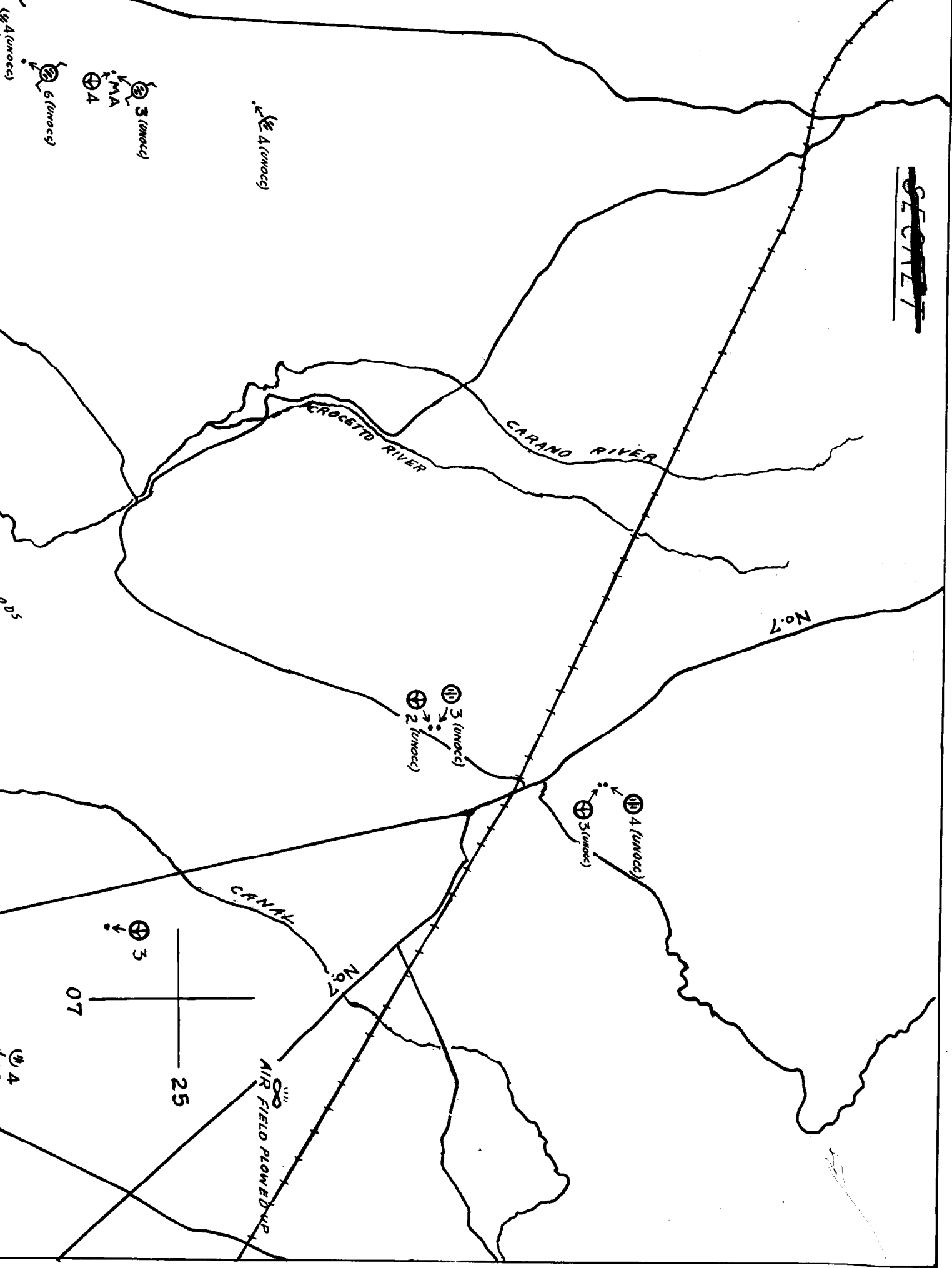
LE: 1" = 320 YDS.

040 30



GRADIENT:  
1:110 AVERAGE (VARIES 1:100 TO 1:135)  
LENGTH: 5600 YDS.  
WIDTH: 30 TO 60 YDS.  
SANDBARS: AT 75 YDS. OFFSHORE (POSSIBLE OBSTACLE).  
AT 200 YDS. " (NO OBSTACLE).  
APPROACH: CLEAR (EXCEPT FOR PROBABLE MINES).  
NO LANDMARKS, NAVIGATIONAL AIDS REQUIRED.  
SUITABLE FOR:  
LCA LCV (P)  
LCT, AGROUND AT 330 FT.  
LST, ONLY WITH 300 TO 400 FT. NAVY PONTONS  
PERSONNEL: YES, WETSHOD. MT & AFV ONLY  
WITH NAVY PONTONS.  
WATERPROOFING:  
FOR A DEPTH OF 4 TO 5 FT.

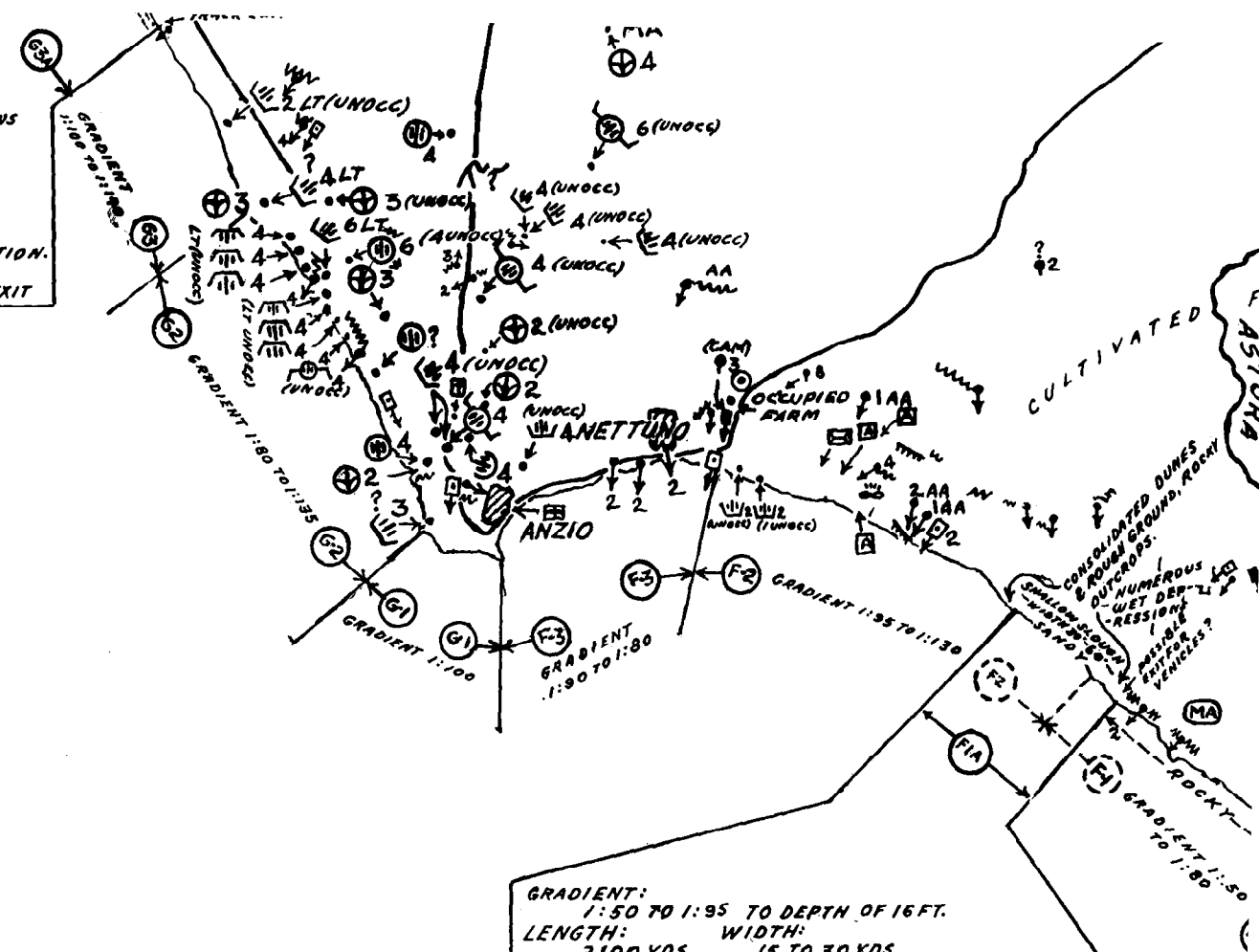
~~SECRET~~



APPROACH:  
 CLEAR (EXCEPT FOR PROBABLE MINES).  
 NO LANDMARKS, NAVIGATIONAL AIDS REQUIRED.  
 SUITABLE FOR:  
 LCA LCV (P)  
 LCT, AGROUND AT 330 FT.  
 LST, ONLY WITH 300 TO 400 FT. NAVY PONTOONS  
 LANDING:  
 PERSONNEL: YES, WETSHOD. MT & AFV ONLY  
 WITH NAVY PONTOONS.  
 WATERPROOFING:  
 FOR A DEPTH OF 4 TO 5 FT.  
 EXITS:  
 PERSONNEL: YES. VEHICLES: AFTER PREPARATION.  
 MAINTENANCE:  
 YES, AFTER CONSIDERABLE PREPARATION OF EXIT  
 ROADS.  
 (SUBJECT TO REVISION)

### LEGEND

	DUAL PURPOSE GUN
	C.D. GUN
	FIELD GUN
	HV AA GUN
	LT AA GUN
	SEARCHLIGHT
	STRONGPOINT
	PILLBOX
	MACHINE GUN
	AT GUN
	AT DITCH
	WIRELESS TOWER
	DUMP
	BARRACKS
	HOSPITAL
	ROADBLOCK
	MILITARY ACTIVITY
	AERODROME
	AIRFIELD
	MORTAR

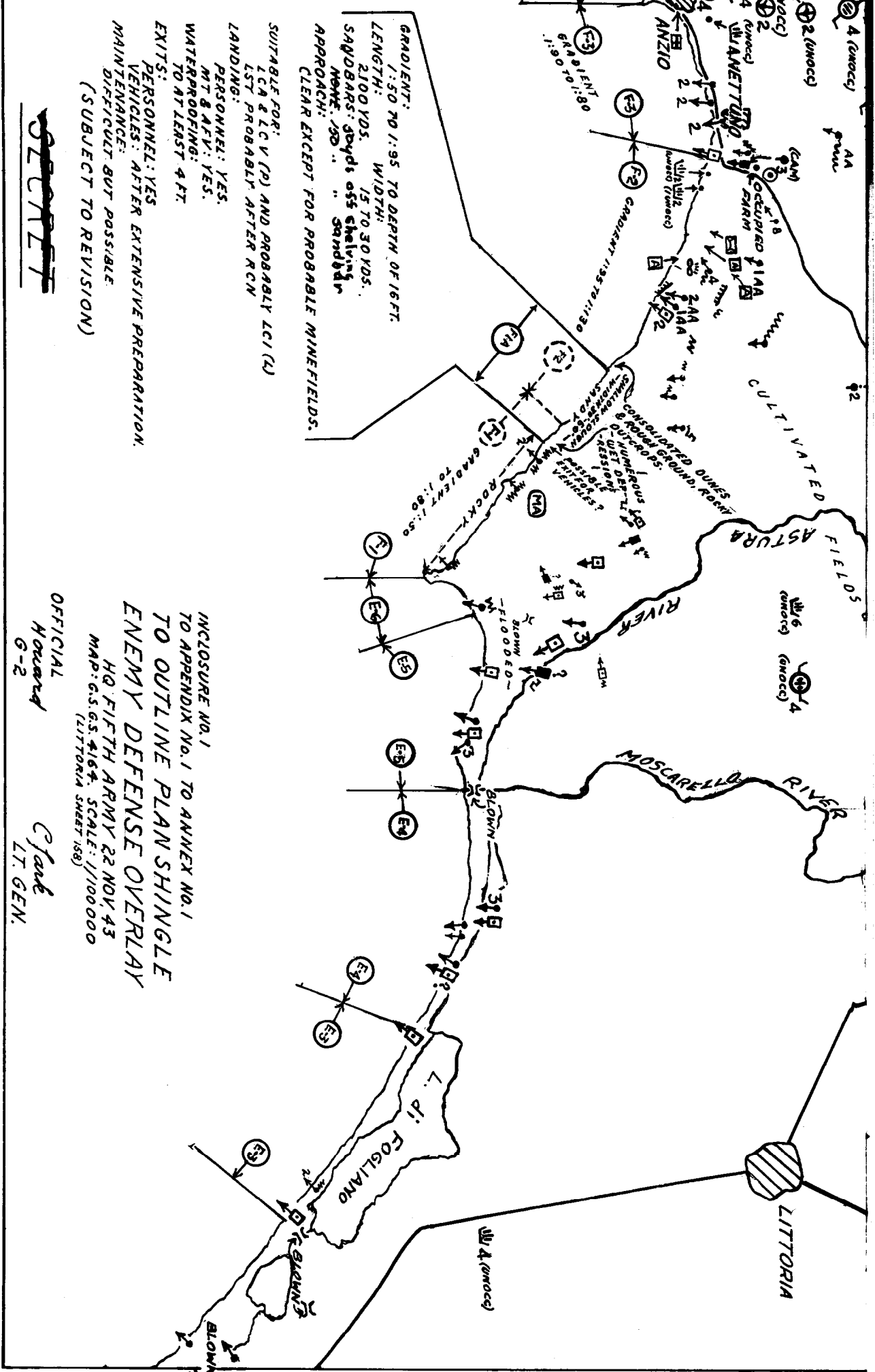


GRADIENT:  
 1:50 TO 1:95 TO DEPTH OF 16 FT.  
 LENGTH: 2100 YDS. WIDTH: 15 TO 30 YDS.  
 SANDBARS: 30 YDS OFF SHALVING  
 NONE 150 " " Sandbar  
 APPROACH:  
 CLEAR EXCEPT FOR PROBABLE MINEFIELDS.

SUITABLE FOR:  
 LCA & LCV (P) AND PROBABLY LCI (L)  
 LST PROBABLY AFTER RCN  
 LANDING:  
 PERSONNEL: YES.  
 MT & AFV: YES.  
 WATERPROOFING:  
 TO AT LEAST 4 FT.  
 EXITS:  
 PERSONNEL: YES  
 VEHICLES: AFTER EXTENSIVE PREPARATION.  
 MAINTENANCE:  
 DIFFICULT BUT POSSIBLE  
 (SUBJECT TO REVISION)

SOURCE: INTERPRETATION OF AERIAL  
 PHOTOGRAPHS AS OF 2 NOV 43

~~SECRET~~



GRADIENT: 1:50 TO 1:95 TO DEPTH OF 16 FT.  
 LENGTH: 2100 YDS. WIDTH: 15 TO 30 YDS.  
 SANDBARS: 30 yds off shelving  
 MONT. 100 .. " sandbar  
 APPROACH: CLEAR EXCEPT FOR PROBABLE MINEFIELDS.

SUITABLE FOR:  
 LCA & LCV (P) AND PROBABLY LCI (L)  
 LST PROBABLY AFTER RCN

LANDING:  
 PERSONNEL: YES.  
 MT & AFV: YES.  
 WATERPROOFING:  
 TO AT LEAST 4 FT.

EXITS:  
 PERSONNEL: YES  
 VEHICLES: AFTER EXTENSIVE PREPARATION.  
 MAINTENANCE:  
 DIFFICULT BUT POSSIBLE  
 (SUBJECT TO REVISION)

INCLOSURE NO. 1  
 TO APPENDIX NO. 1 TO ANNEX NO. 1  
 TO OUTLINE PLAN SHINGLE  
 ENEMY DEFENSE OVERLAY  
 HQ FIFTH ARMY 22 NOV 43  
 MAP: G.S. 4164. SCALE: 1/100,000  
 (LITTORIA SHEET 158)

OFFICIAL  
 Howard  
 G-2

C. J. G.  
 LT. GEN.

UNCLASSIFIED

BUTTS

CONSPICUOUS  
TOWER

1

CONSPICUOUS  
TOWER

STRAIGHT  
ROCK

2

3

COURSE 035°

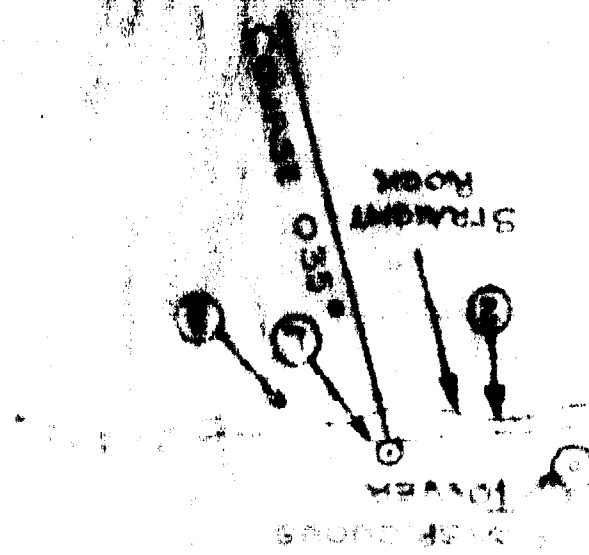


OK SCALE 1:170

LOCATIONS LOOK LIKE ON

AND PRINTS WITH

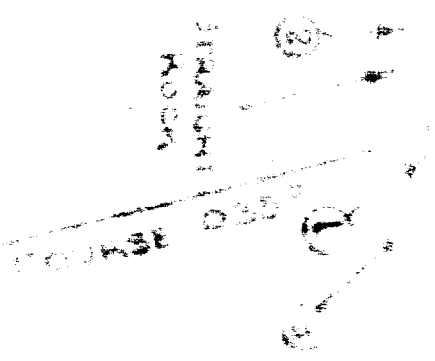
DATA AND APPROX



①

CONCRETE TOWER

BUT



APPROXIMATE  
DEPTH WHERE

SHOW LINES OF SOUNDINGS

SCALE: 100 YDS. = 1 INCH

UNCLASSIFIED

~~U. S. SECRET~~  
~~Equals British Most SECRET~~

COPY No. 82  
4 December 1943

OPERATION P. W. Q.  
Beach Reconnaissance.

INTRODUCTION.

1. Method. One sortie was made with 3 folbots from ITALIAN Moto Silurante 24 to carry out offshore reconnaissance of beach between positions  $41^{\circ}31\frac{1}{2}'$  N,  $12^{\circ}34'$  E, and  $41^{\circ}30\frac{1}{2}'$  N,  $12^{\circ}34\frac{1}{2}'$  E.

Party consisted of 1 unit C.O.P.P. Sub-Lieutenant K. G. Patterson with A.B. G. D. Lockhead, and two units Z Special Boat Section (N.A.), Captain A. R. McClair with Sgt. R. Sidlow, and Captain W. G. Davis with C.S.M. J. Galloway.

Owing to difficulty in getting M.S. 24 into position, the folbots did not set out until 0045 hours, 1-1/4 hours later than intended.

Sub-Lieutenant Patterson and A.B. Lockhead did not return from the operation. (This is dealt with in separate report attached.)

Landfall was made on TORRE CALDARA which was prominently silhouetted. Captain Davis made his reconnaissance here, while Captain McClair went northwards, located Southern end of G-3-a Beach and made his reconnaissance there.

The second folbot to return did so at 0320 hours.

2. Alterations and Suggestions to Plan. As in Operation P.W.P., difficulty was found in identifying the beach and remarks made under this heading in that report again apply.

3. Weather, Sets, Sea, etc. Light E wind at first, veering to ESE and rising throughout. Slight swell out to sea, increasing considerably later. Swell also increased on the approach to shore, breaking into 2 foot surf, 50 yards offshore. This also increased. Visibility 1 mile, deteriorating.

There appeared to be a set from the SE during the final stages, and was brought about by the strong wind which rose. This was not noticed when the wind was light.

4. Enemy Vigilance, Lights, etc. No signs of activity whatever along the whole beach. Some lights were seen farther south.

5. Chances of compromise. Apart from the possible chances of compromise through the loss of Sub-Lieutenant Patterson's folbot, we consider that the rest of the party and the M.S. were undetected.

6. Beach Report. The beach covered is low and narrow and there are very few marks to identify it. TORRE CALDARA stands on a bluff, with cliff rising almost from the waters edge, but northwards from there the coast is low, with no cliff. The rocks off TORRE CALDARA, as seen in aerial photographs, were not discovered by us. Off TORRE CALDARA there appears to be a bar 6 feet deep, 60 yards offshore, and a shelf 6 to 7 feet deep between 100 and 150 yards offshore. The bottom consists of hard sand.

At the southern end of Beach G-3-a, the bottom is sandy and slopes evenly from the shore, with no bar. Further details are shown in the individual reports.

Signed A. R. McCLAIR, Captain  
Z Special Boat Section (N.A.)

-1- 2nd in Command of Reconnaissance Part

~~U. S. SECRET~~  
~~Equals British Most SECRET~~

UNCLASSIFIED

~~U. S. SECRET~~  
~~Equal to British MOST SECRET~~

OPERATION P. W. Q.

Reconnaissance Report by Captain A. R. McClair, Z Special Boat Section (N.A.).

On the night of 2nd/3rd December 1943, I carried out a reconnaissance by folbot, with Sgt. R. Sidlow, Special Boat Section, as my partner, of Beach G-3-a - Map Sheet - ITALY 158 IV. The boundaries of the beach were pts 798258 to 810238. We were in No. 2 Folbot, and our position was to be as near as possible halfway between the outer extremities of the beach.

The party sailed in M.S. 24 (ITALIAN Navy) at 1830 hours, and it was due to be in position at 2330 hours. Owing to navigational difficulties, it was not in position until 0045 hours.

LOG:

- 0045 Slipped from M.S. 24, and set course of 040° (magnetic) towards the shore. Light swell, increasing nearer shore, and breaking into surf. Light off-shore wind. Visibility 1 mile, moonless.
- 0058 Landfall 50 yards NE of building which, having seen new photographs, I can identify for certain as TORRE CALDARA. This meant that we were about two mile southeast of our objective. We were already 1-1/4 hours behind schedule, but after consultation with Sgt. Sidlow, we decided to accept the risk of being too late for our pick-up.
- 0115 Commenced to paddle NW in an attempt to locate the beach. Noticed lights flashing on shore well SE of our position.
- 0140 Came across Sub-Lieutenant Patterson (in command of party) and informed him I believed we were out of position. While speaking to him, a very large wave almost swamped both folbots. He started to come along the coast with us.
- 0145 Sub-Lieutenant Patterson decided to turn inshore and verify position. The sea was getting rough, with a fair surf. He told me to continue on my course, locate beach and try and get a line of soundings. This was the last I was of him.
- 0150 Heard engines, possibly aircraft, but which sounded like craft of similar type to M.L. Moved out to 100 yards offshore as I suspected the presence of a M.G. post.
- 0200 Stopped 150 yards short of valley cutting through line of trees. I am reasonably certain that this was the valley of the river at the SE end of Beach G-3-a, which enters the sea at point 810238.

We were by now hard pressed for time, as we were due to return to M.S. 24 by 0230, though we had an hour safety margin in hand. The wind had by now freshened considerably, and the sea inshore was getting quite rough. It was out of the question to attempt a proper line of soundings, and it would also have been unwise to have risked the folbot less than 50 yards from the shore, so I left the folbot and swam ashore to obtain what information I could. This information is detailed separately.

Visibility was deteriorating rapidly, and when I was on the shore the folbot was invisible at an estimated distance of 50 yards, from end on view.

~~U. S. SECRET~~  
~~Equal to British MOST SECRET~~

UNCLASSIFIED

~~U. S. SECRET~~  
~~Equal to British MOST SECRET~~

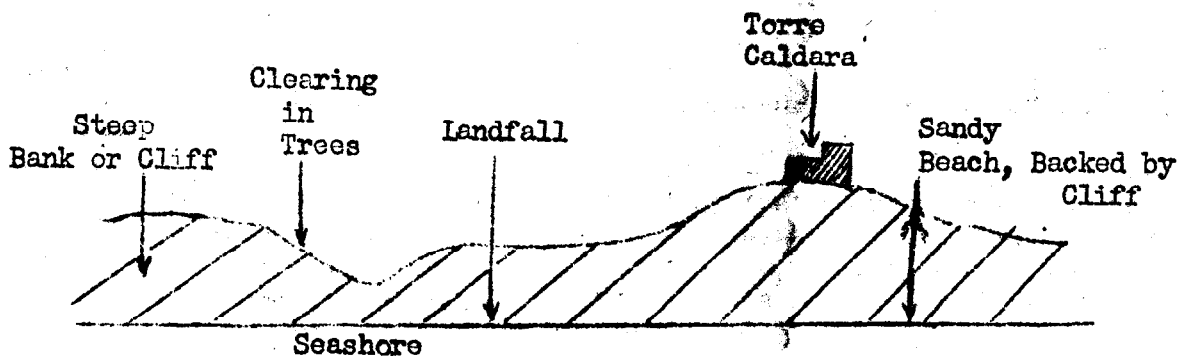
- 0210 Returned to folbot and took further soundings with my sounding line up to and estimated distance of 250 yards from the shore.
- 0215 Went 150 yards northwest to identify position opposite valley edged on left by tall trees, which stood out clearly.
- 0220 Set course on return journey. Wind had by now veered to ESE and was becoming stronger.
- 0320 Re-embarked on M.S. 24.

REMARKS AND CONCLUSIONS.

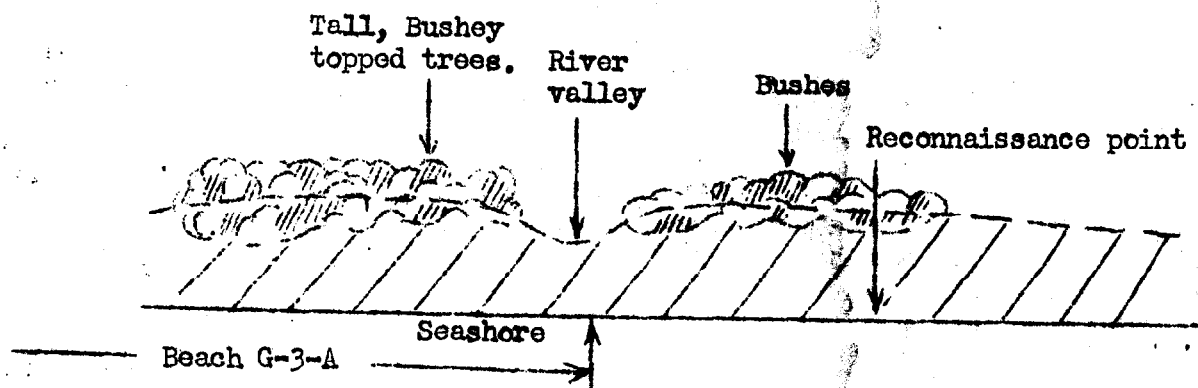
1. Navigation Aids. These are at first a little difficult to identify, but provided one has some idea of one's position, the following can be identified throughout the area covered commencing from the northwest end.

- a. Prominent gap in trees formed by river which has its mouth at pt 810238 (Extreme right end of the beach)
- b. Gap or clearing in trees (see silhouette) (30 yards to left of river or gulley) at pt 823216.
- c. TORRE CALDARA (See silhouette)

Silhouette of coast at TORRE CALDARA.



Silhouette of Coast at Southern Extremity of Beach G-3-a.



~~U. S. SECRET~~  
~~Equal to British MOST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

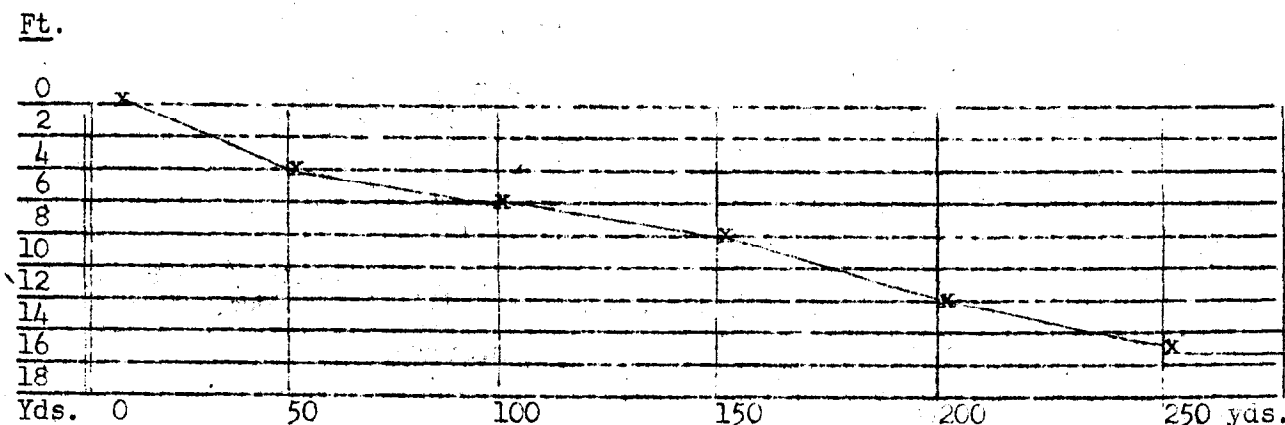
~~U. S. S. E. C. R. E. T.~~  
~~Equals British MOST SECRET~~

2. Soundings. There is no trace of any sand bar or shoal at the southern end of Beach G-3-a. Fifty yards offshore there is a depth of 4 feet of water, decreasing evenly up to the water's edge. Farther out, the water deepens in a regular manner - I took soundings at intervals, reading 6, 8, 12 and 15 feet, the last sounding being at an estimated distance of 250 yards from the shore.

This part of the beach would seem to be a good place for landing infantry with no inconvenience other than probably wet feet - in calm weather.

The sea bottom was composed of fairly hard sand. No rocks were located.

Rough Graph of Estimated Soundings.



In the central sector of my reconnaissance (about pt 818225) large waves were encountered 60 or 70 yards offshore. This would appear to bear out the possibility of a bar existing there. No further information is at present available.

3. Sets. There appeared to be a surface set from the SE along this stretch of coast, probably caused by the wind which was blowing at the time. It is impossible to say what conditions would be like under other circumstances.

4. State of Sea and Wind. Slight swell out at sea, increasing considerably inshore. Surf from 40 yards off beach, 2 feet high at first, then increasing. Swell out at sea increased steadily. Surf inshore was too dangerous for a folbot to operate in at night. Landing craft could probably have operated, but even such craft would probably find difficult conditions in an onshore wind.

Light east wind at first, veering ESE and rising throughout.

5. Visibility: One mile at first, deteriorating.

6. Although lights were seen considerably south of us, the area covered showed no signs of activity. We thought we may possibly have heard voices above the wind at one point, but no action was taken. As far as I could tell it seemed unlikely that the operation was compromised.

7. The co-operation and assistance given by Lieutenant Simpson-Jones, R.N.V.R. and the Officers and crew of M.S. 24, were excellent throughout.

8. A report on the probable circumstances concerning Sub-Lieutenant Patterson's non-return is made separately.

A. R. McClair

Z Special Boat Section (N.A.)

~~U. S. S. E. C. R. E. T.~~  
~~Equals British MOST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~U. S. S. E. S. E. T~~  
~~Equals British Most SECRET~~

OPERATION P. W. Q.

Report of Reconnaissance By Captain W. G. Davis, R.A., (SBS)

On the night of 2nd/3rd December 1943, with C.S.M. Galloway, J., as my No. 2, I was detailed to carry out a reconnaissance of the South extremity of proposed Landing Beach M/R 809239, Sheet 158 IV.

We left the parent craft, M.S. 24 at 0045 hours and proceeded towards land on a compass course of 040°, having been informed by Lieutenant Simpson-Jones, R.N.V.R. of our position.

Our landfall was a large white building, the TORRE CALDARA, M/R 823214, Sheet 158 IV which we made at 0105 hours. Shortly afterwards we were caught in the surf, and after shipping an amount of water, were carried inshore and grounded in shallow water, sandy bottom, below the TORRE CALDARA, having passed on the north side of the rocks, which I did not actually see.

We pushed off the canoe and proceeded north to the other side of the Gully and after several attempts planted the stake to anchor the distance line. This was in some six inches of water. We then proceeded to take our line of soundings, Galloway paddled slowly out to sea whilst I payed out the distance line and took soundings at 10 yd. intervals. For the first 30 yards the surf was troublesome and on two further occasions we shipped water. When the soundings were complete 150 yards, we returned to shore to retrieve the stake after which we proceeded to a point 130 yards from the shore to commit to memory what we could see of the River mouth.

I proceeded to drag the sounding line from 150 yards to 230 yards from the shore with a view to feeling for any sand bar that might exist. The depth of water increased from 7 feet at 150 yards to 3 fathom at 230 yards. I decided to paddle the canoe in a Northerly direction along the coast at 150 yards for a distance of some 400 yards to recognize any prominent objects. None could be recognized.

At 0205 hours C.S.M. Galloway drew my attention to three lights flashing at a distance of approximately 1/2 mile south (ashore).

I had been instructed to return to the parent vessel by 0230 hours and as there was little time left decided to proceed to the M.S. 24 immediately.

Wind, Sea and Tide. Wind from easterly direction, force two. Slight swell increasing inshore. Surf commenced 50 yards offshore. Surface set to SE. I do not consider this surf would have been troublesome to landing craft, but conditions would be much worse with an onshore wind.

Navigational Aids: None apart from TORRE CALDARA.

Times in Brief.

0045	Left M.S. 24
0105	Landfall on large white building.
0115	Ran ashore in shallow water below large building
0125	Planted stake on north side of Gully mouth to anchor distance line.

~~U. S. S. E. S. E. T~~  
~~Equals British Most SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

- 0145 Completed line of soundings; returned to beach to collect stake.
- 0150 Took separate sounding at 230 yards.
- 0155 Proceeded north along coast at 150 yards from shore to endeavor to further identify positions.
- 0205 Returned to parent craft.
- 0225 Canoe inboard.

Signed W. A. DAVIS, Captain, R.A.  
(Z.S.B.S.)  
3-12-43

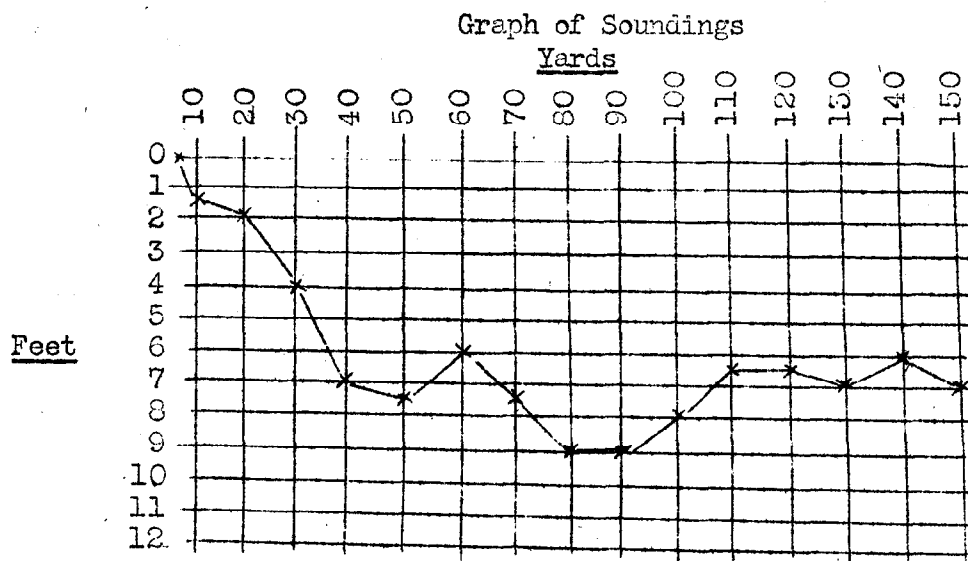
~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

-2-

UNCLASSIFIED

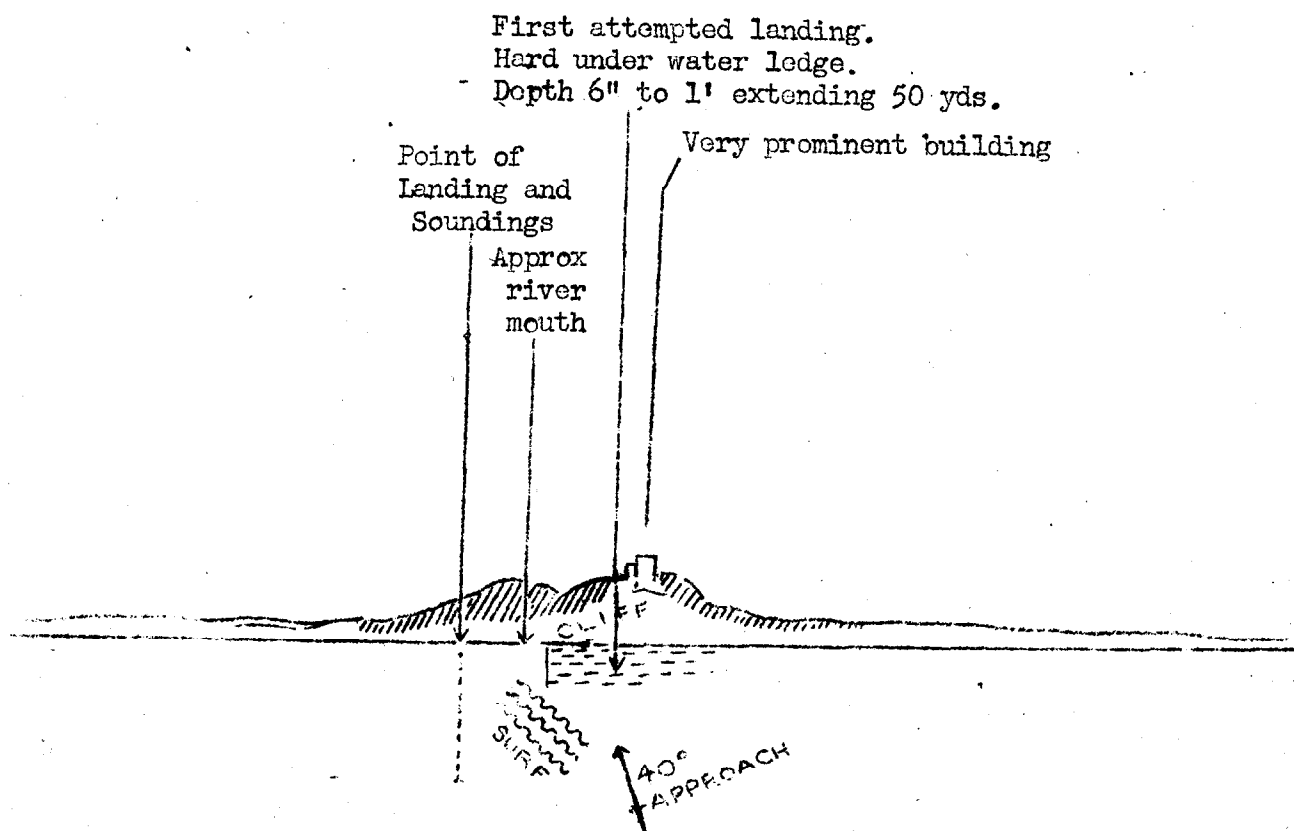


UNCLASSIFIED



3 Fathoms at 230 yards

SILHOUETTE OF COAST AT TORRE CALDARA



Distance From Shore: 200 yds.

Visibility: Fair

Scale: App. 6" = 1 Mile.

Time: 0150 hrs.

Date: 2.12.43.

~~U. S. S. F. O. R. N. E.~~  
~~Equally British Foot Secret~~

-3-

UNCLASSIFIED

UNCLASSIFIED

~~U. S. S. E. T.~~  
~~Equal British Most Secret~~

OPERATION P. W. Q.

Report on the Failure of Sub-Lieutenant K. G. Patterson and AB G. D. Lockhead, C.O.P.P. P/JX 183136, to return from Operation P. W. Q.

On the night of 2nd/3rd December 1943, Sub-Lieutenant K. G. Patterson, R.A.N.V.R. was in command of Operation P. W. Q. with AB G. D. Lockhead. I was his second in command, and we shipped from M.S. 24 at 0045 hours.

I saw him stop a good distance offshore (probably about 600 yards), when he presumably obtained his landfall through night glasses, and turned Northwest according to plan.

I continued inshore, and realized that we were about two miles southwest of our position, and also turned Northwest in order to search for the proper beach.

After going about 3/4 mile in this direction, I saw Sub-Lieutenant Patterson's folbot, and went up close to him to inform him of my belief that we were out of position. While we were talking, a very large wave almost swamped both folbots. The weather was deteriorating, and visibility decreasing.

Five minutes later, at 0145 hours, he decided to stop and identify his position and told me to continue northwards and take soundings if there was time. He turned inshore, and I noticed at the time that a good surf was running. This was the last I saw of him.

When I reached my position I found the surf too dangerous to take in the folbot, so I left it 50 yards offshore and swam in. If Sub-Lieutenant Patterson took his folbot into the surf in such bad visibility, it is very likely that he foundered.

On my return trip, at about 0245 or 0250, I imagined I heard voices above the wind. Sgt. R. Sidlow, my folbot partner, also heard the same, but as we were so unsure, we did not mention it to one another at the time. I consider it just possible that they saw us from the shore, and were calling to us. If I had been more sure at the time that I had heard voices, I should have taken them for the enemy, and put out to sea, as I had no idea that No. 1 folbot was in trouble.

During the whole period we heard no firing, or any other unusual circumstances.

I think it most likely that the folbot foundered in the surf, and was lost. Both Sub-Lieutenant Patterson and AB Lockhead were wearing good life jackets, and there is every likelihood that they made the shore in safety.

They had on them emergency rations for 48 hours, each had about \$15 in ITALIAN Lire, and Sub-Lieutenant Patterson had a silk handkerchief of the whole of ITALY.

In the event of such circumstances their plans were:

- a. If the weather was good enough, to make for CIRCEO and then set a course for PONZA.
- b. If the weather was unsuitable, to make for CIRCEO by folbot, go ashore and hide or destroy folbot, then get inland and make their way back through the enemy lines.

Plan (a) was definitely impracticable, as the weather was too bad. Plan (b) is modified by the fact that their folbot was probably lost. If it was not lost or damaged, it is difficult to understand why no signals from them were seen while

~~U. S. S. E. T.~~  
~~Equal British Most Secret~~

UNCLASSIFIED



UNCLASSIFIED

~~U. S. SECRET~~  
~~Excluded from automatic downgrading and declassification~~

HEADQUARTERS FIFTH ARMY  
A. P. O. #464, U. S. Army

COPY NO. 82

22 November 1943

G-2 ESTIMATE

APPENDIX NO. 1  
to  
ANNEX NO. 1  
to  
Outline Plan SHINGLE

Maps: GSCS 4164, GSCS 4229, GSCS 2758, GSCS 4072, GSCS 4230, GSCS 4228, ANSM 592,  
Tern Plan ANZIO - NETTUNO, Photo Mosaic.

1. MISSION. To assist the main attack of Fifth Army in the capture of  
COLLI LATIALI.

2. SUMMARY OF SITUATION.

a. Population:

(1) The normal population of towns and cities is estimated as follows:

ROME	1,327,118
VELLETRI	30,145
TERRACINA	18,562
FROSINONE	16,475
SEZZE	15,250
FIRENTINO	14,622
CECCANO	14,077
PRIVERNO	12,637
MARINO	11,844
FRASCATI	11,420
NETTUNO	9,931
GENZANO	9,461
CORI	8,885
VALMONTONE	7,514
ANZIO	6,950
LITTORIA	6,500
SONNINO	5,938
ARICCIA	5,312
ROCCA DI PAPA	4,920
GROTAFERRATA	4,481
FONDI	4,401
CASTEL GANDOLFO	2,740
LANUVIO	2,655
SERMONESE	2,310
ALBANO	2,289
BASSIANO	2,062

(2) Population of towns and cities at the time of occupation by our forces and for a short period thereafter may be considerably lower than estimated in paragraph 2, a, (1) for the following reasons:

- The enemy usually clears civilians from an area when preparing a defensive position.
- Civilians often leave a town and go into the back country when the front lines approach the town or when it is subjected to air bombardment or artillery fire.

85-24-115

~~U. S. SECRET~~  
~~Excluded from automatic downgrading and declassification~~

-1-

UNCLASSIFIED

UNCLASSIFIED

~~SECRET~~  
~~For Official Use Only~~

- (3) After a town has been occupied, an influx of civilians can be expected as the inhabitants return to their homes.
- (4) The civil population is generally friendly to the Allied forces. Some help from civilians may be expected, especially in locating mine fields and booby traps, and in the capture of enemy soldiers hiding within our lines.

b. Political: Latest reports indicate the following leading appointments in the Republican Fascist Government:

Premier	BENITO MUSSOLINI
National Defence	MARESCIALLO RODOLFO GRAZIANI
Chief of the General Staff	GENERAL GASTONE CAMBARA
Commanding General of the Militia	LT. GENERAL RENATO RICCI (reported dead)
Under Secretary for Air	COLONEL BOTTO
Under Secretary of State	ADMIRAL TERRINI
Minister of Interior	GIUDO BETTARINI GUIDI
Popular Culture	FRANCO MEZZASOMA
Minister of Justice	PIERO PISANTI
Minister of National Education	C. A. BIGGINI
Communications	PEVERELLI
Finance	GIAMPIETRO FELLEGRINI
Secretary to the P.R.F.	ALESSANDRO PAVOLINI
Inspector General of the Party	PIZZIRANI
Ambassador Min. Plen., Berlin	FILIPPO AFFUSO
Ambassador without portfolio	GIOVANNI CAPASSO: Conte di Caprana

The seat of the Republican Fascist Government is reported to be at BELLUNO.

c. Military:

(1) Estimated Italian Military Elements.

- (a) Infantry Battalions: estimated to be organized along the lines of former Blackshirt Legions, with Italian equipment and arms. They are probably reinforced by a machine gun company. A number of these battalions may be guarding the coast, but due to poor response to the Fascist recruiting efforts, their number should be small, probably not exceeding six battalions or about 2,500 men.

(b) Organization of Infantry Battalion:

<u>Unit</u>	<u>Troops</u>	<u>Remarks</u>
Hq Co	130	Administrative, signal and reconnaissance sections.
1st Rifle Co	150	Armed with rifles, pistols, and 1 lmg per squad.
2nd Rifle Co	150	" " "
3rd Rifle Co	150	" " "
4th MG Co	220	Armed with 8 hmg, 2 x 81mm mortars, 4 x 37mm AT guns.
Total:	800	

(2) Estimated German Military Elements:

~~SECRET~~  
~~For Official Use Only~~

UNCLASSIFIED

UNCLASSIFIED

~~UNCLASSIFIED~~  
~~SECRET~~

(b) HERMANN GOERING - PANZER DIVISION, SEIZE area, Commanding Officer, LT. GENERAL CONRAD, Approximate total strength 11,000

Unit	Commanding Officer	Approx. Strength	Organization	Armament	Equipment
<u>Hq Rcn Bn</u>	Capt REBHOLZ	524			
<u>Hq Co</u>					
1st Co, Armd Car Co	1st Lt NEIDHARDT	50-60			
2nd Co, Rifle Co	1st Lt WEISSKE	60			
3rd Co, Rifle Co	Lt SIGGS (?)	100			
4th Co, AT Co					
5th Co, Hvy Co	1st Lt FLUEGEL	60	1 Inf Gun plat, 1 hmg plat, 1 hvy mortar plat	AT guns	
6th Co, AA Co	1st Lt TEUFEL	1,500(?)	2 Bn tanks, 1 Bn SP guns	AA guns 40 tanks	
<u>Hq Tank Regt</u>					
<u>Regt Hq</u>					
<u>1st Bn</u>					
1st or 2nd Bn	Reported to be reorganizing in GERMANY.				
1st or 5th Co	Capt METTLER				49 tanks, all Mk IV special
2nd or 6th Co	1st Lt LUPKE				
3rd or 7th Co	Lt WINTER				
4th or 8th Co	1st Lt SCHOENHERR				
<u>3rd Bn</u>					
<u>Bn Hq</u>	Capt KOLTZ				
	1st Lt BELLINGER (?)				
10th Co	Lt BLOCK				10 x 75mm SP, all on Mk III tank chassis
11th Co	1st Lt GERSCHONECK				10 x 75mm SP
12th Co					10 x 75mm SP
<u>Hq P.G.R. #1</u>					
<u>1st Bn</u>					
<u>2nd Bn</u>					
5th Co	Col HAASS	600(?)			
6th Co	Reported disbanded in SICILY.				
7th Co	1st Lt ARNHUTTER	300(?)	3 Rifle & 1 Hvy Co		
8th Co	1st Lt NIEMEYER	90			
		60			
	Capt MAYER	100	1 mortar plat, 1 Engr plat, 2 x 81mm mortars, 3 x 75mm		
			1 Inf Gun plat, 1 AT plat		
		100	2 platoons		
10th Co	1st Lt HOCH				Inf guns, 1 x 75mm AT gun
					4 x 150mm Inf guns

NOTE: 3rd Battalion has not been identified since SALERNO and 10th Company is claimed to be Heavy Weapons Company.

~~UNCLASSIFIED~~  
~~SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~II SS T.O. 11~~  
~~Equal to British Foot Guards~~

(a) <u>SS REICHSMANNBRIGADE, ROUTE area, Commanding Officer, STUBBAND FRIEDER GESSELLE</u>			
Unit	Approx. Strength	Organization	Armament
<u>Brigade Hq</u>	300	Signal platoon, workshop motor column, motorcycle platoon, band	
<u>Inf Gun Co</u>	200		6 x 75mm guns (Inf)
<u>1st Bn "De Illinger"</u>	1,000	Signal, motorcycle section 3 Rifle, 1 Hvy platoon	Rifles, 1mg #34
<u>Hq Co</u>			
<u>1st Co</u>			
<u>2nd Co</u>			
<u>3rd Co</u>			
<u>4th Co, Hvy Co</u>			
<u>5th Co (AA)</u>			
<u>6th Co, AT</u>			
<u>2nd Bn "Mayer"</u>	1,000	3 platoons 3 or 4 platoons	1mg, mortars 12 truck-drawn 20mm AA guns, 1 1mg 6 x 50mm AT guns, 2 x 75mm AT guns
Reported from heretofore. Expected to be organized along the same line as the "De Illinger" Bn.			
<u>Assault Gun Bn</u>			
<u>SP Artillery</u>	500	3 batteries	1st reported 10 SP guns, type unknown
<u>AA Bn</u>	400	1 x 20mm battery (AA), 1 x 37mm battery (AA), 1 x 88mm battery (AA)	12 x 20mm AA guns, 8 or 12 x 37mm AA guns, 3 x 88mm AA guns
<u>AT Bn</u>	600	3 batteries	50mm and 75mm AT guns

NOTE: Brigade strength reported as low as 3,000 and as high as 5,000 while in CORSICA. T.O. of the units now bring the strength closer to 4,000. The personnel is described as being very young, 40% under 18 years of age.

~~II SS T.O. 11~~  
~~Equal to British Foot Guards~~

UNCLASSIFIED

UNCLASSIFIED

~~UNCLASSIFIED~~

Equipment

Armament

Approx.

Organization

Strength

Commanding  
Officer

Unit

Olze or Regio Bn

1st Co

2nd Co

3rd Co

4th Co

HG P.G.R. #2

Regt Hq

1st Bn

1st Co

2nd Co

4th Co

2nd Bn

3rd Bn

13th Co

14th Co

115 P.G.R.

Regt Hq

1st Bn

1st Co

2nd Co

3rd Co

4th Co

2nd Bn

5th Co

6th Co

7th Co

8th Co

Capit Olze

300

3 platoons

60

1 platoon

90

4 platoons

500

Col Corwin

Maj Kluge

60

1st Lt Geyhr

1st Lt Litkowski

50

1st Lt Weizig

Claimed to have been disbanded after Sicilian Campaign.

Same as 2nd Battalion.

2 platoons

900

Col Mauke or Col Haase

Maj Mueller

300

Lt Eck

Lt Hickie or Henkel

80

Lt Gross

80

Lt Leister

Split between 1st

and 3rd Bns.

7 lmg, 1 lmg, 1 mortar

3 x 50mm AT guns, 3 x 75mm or

150mm Inf guns

87 guns

4 x 75mm Inf guns, 3 x 75mm

8 lmg, 2 lmg, 1 mortar

3 x 75mm Inf guns

4 lmg, 5 x 80mm mortars

UNCLASSIFIED

~~UNCLASSIFIED~~

-5-



~~UNCLASSIFIED~~  
~~IT S S P E~~  
~~Encls. Part 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100~~

Unit	Commanding Officer	Approx. Strength	Organization	Armament	Equipment
<u>3rd Bn</u>	MaJ DEDEKIND	300(?)			
9th Co	Capt MUELLER				
10th Co	1st Lt MUELLER				
11th Co	Lt JACUBOVSKI	70		4 hmg, 1 mortar	
12th Co				2 hmg, 6 mortars	
13th Co	Lt RONNELL	120		4 x 75mm, 2 x 150mm Inf guns	
14th Co	2nd Lt WUNDERLICH	21		3 x 50mm, 3 x 75mm AT guns	
<u>HG AT Bn</u>					
Not yet identified					
<u>HG Eng Bn</u>					
Bn Hq	Capt HAEFFNER	600			
1st Co		400(?)			
2nd Co	Lt AUGENSTEIN				
3rd Co	Lt WILFORD				
4th Co	1st Lt BRUNCK		2 platoons		
	Capt WEIMER				
<u>HG Signal Bn</u>					
Not yet identified; elements estimated to be allotted to various line formations.		400(?)	1 telephone company 1 wireless company 1 supply column		
<u>HG Arty Regt</u>					
Regt Hq	Lt Col OEARING	2,000	3 light, 1 medium Bn.		
<u>1st Bn, Lt</u>					
1st Battery	Capt von KALDEN			4 x 105mm gun Howitzers	
2nd Battery	1st Lt KUEHMAN			4 x 105mm gun Howitzers	
3rd Battery	1st Lt RENDLER			4 x 105mm gun Howitzers	
<u>2nd Bn, Lt</u>					
4th Battery	1st Lt WURSTENBERG			4 x 150mm gun Howitzers	
5th Battery	Capt NEUBAVEN			4 x 150mm gun Howitzers	
6th Battery	1st Lt WILM			4 x 150mm gun Howitzers	
<u>3rd Bn, Lt</u>					
7th Battery		70		3 x 150mm Howitzers	
8th Battery				4 x 150mm Howitzers	
9th Battery	Lt MEYER			4 x 150mm Howitzers	

Reformed after  
SICILY from 70M Bn

~~1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100~~

UNCLASSIFIED

UNCLASSIFIED  
~~U.S. GOVERNMENT~~  
~~EXCLUDED FROM AUTOMATIC DOWNGRADING AND DECLASSIFICATION~~

Unit	Commanding Officer	Approx. Organization	Armament	Equipment
------	--------------------	----------------------	----------	-----------

4th Bn, Medium	Capt von HOMBURG			
10th Battery			4 x 150mm gun Howitzers	
11th Battery			4 x 150mm gun Howitzers	
12th Battery			4 x 150mm gun Howitzers	
13th Battery		2 sections	5 x 150mm REBELLIWHEELERS	
HQ AA Regt	Lt Col MAIER	1,500	(possibly some 210mm's)	

Regt Hq				
1st Bn	Capt SCHULZ		4 x 88mm AA guns, 2 x 20mm AA MG	
1st Hvy Dory	Lt MUELLER		4 x 88mm AA guns, 2 x 20mm AA MG	
2nd Hvy Btry	Lt UHLICH		4 x 88mm AA guns, 2 x 20mm AA MG	
3rd Hvy Btry			4 x 88mm AA guns, 2 x 20mm AA MG	
4th Lt Btry			15 x 20mm AA MG, 4 x 60cm SL	
5th Lt Btry	1st Lt WILLE		15 x 20mm AA MG, 4 x 60cm SL	
6th SL Btry			15 x 20mm AA MG, 4 x 60cm SL	
2nd Bn	Capt GRAP VESSEL		9 x 150cm SL, 6 Sound Locators	

Same as 1st Battalion

12th SL Btry			9 x 150mm SL, 9 Sound Locators	
3rd Bn (Searchlight)				
11th Lt Btry			9 x 150mm SL, 9 Sound Locators	
10th Lt Btry			9 x 150mm SL, 9 Sound Locators	
9th Hvy Btry				
8th Hvy Btry				
7th Hvy Btry				
3rd Bn (Searchlight)				
12th SL Btry				

Division Services  
Motor Transport columns, Quartermaster Units, Medical Units  
2,000

(c) 3rd P. G. DIVISION, Commanding Officer, Lt. Gen. GRAESSER, Approximate total strength 8,000

~~U.S. GOVERNMENT~~  
~~EXCLUDED FROM AUTOMATIC DOWNGRADING AND DECLASSIFICATION~~

UNCLASSIFIED

UNCLASSIFIED

~~U.S. SECRET~~  
~~Requires British Most Secret~~

Unit	Commanding Officer	Approx. Strength	Organization	Armament	Equipment
<u>103rd Pan Bn</u>	Capt ABRAHAM	460			8 wheel recon cars
Hq Co					
1st Co, Arm'd Car Co			3 platoons	12 lng, 1 hmg, 1 x 81mm mortar	
2nd Co, Rifle Co	1st Lt WUBBENO		3 platoons	4 x 75mm SP, 1 x 75mm AT	
4th Co, Rifle Co	1st Lt ZITNERMAN	170		2 x 75mm Inf guns	
5th Co, Hvy Co	1st Lt HOFFMAN		4 platoons	29 or 41 SP guns	Reported equipped with SP guns and not tanks
<u>103rd Assault Gun cr Tank Bn</u>		400			
Hq Co					
1st Co				Co's had originally 12 x 75mm SP guns on Mk II chassis, German T.O. Allot. 7 or 10 SP guns per Company	
2nd Co					
3rd Co					
4th Co					
<u>8th P. I. Regt</u>					
Regt Hq	Lt Col GROSSER	1,100(?)	3 Bns, 13 & 14 Co's.		
1st Bn					
1st Co	Maj HECKEL (?)	200(?)	3 Lt Co's, 1 Hvy Co		
2nd Co	1st Lt BRENGER		Possibly dissolved		
3rd Co		70	"		
4th Co	Lt URBAN	30			
2nd Bn	Capt ABRAHAM	70		3 lng, 1 hmg, 2 mortars	
5th Co	Capt LITKOV	300(?)		4 hmg, 24 lng, 2 mortars	
6th Co	1st Lt HEUBLEIN	100		10 lng, 4 hmg, 2 x 80mm mortars	
7th Co	1st Lt SCHAEFER	27		6 lng, 2 mortars	
8th Co	1st Lt SCHUETZ	70		9 lng, 4 hmg	
	1st Lt LIEBISCH	40			

~~U.S. SECRET~~  
~~Requires British Most Secret~~

UNCLASSIFIED

UNCLASSIFIED

~~TOP SECRET~~

Unit	Commanding Officer	Approx. Strength	Organization	Armament	Equipment
3rd Bn	Capt KRAUSE	250	2 platoons	6 lmg, 3 AT Rifles, 2 x 81mm mortars	
9th Co	1st Lt BURCK	40			
10th Co		80	3 Rifle, 1 MG plat	12 lmg, 4 lmg, 2 mortars	
11th Co					
12th Co	1st Lt BRACKEMANN	80		2 x 50mm AT, 2 x 75mm Inf How	
13th Co		(?)		105mm Inf Guns (?)	
14th Co		(?)		3 x 50mm AT	
29th P. I. Regt	Col MOLLER	1,000 (?)			
Regt Hq					
1st Bn	Maj SCHULZENDORF	250 (?)			
1st Co	Capt von HAGER	70		4 lmg, 1 x 81mm mortar	
2nd Co	Lt STELL BRUCKNER	50		6 lmg, 4 lmg, 2 mortars	
3rd Co		50	Wiped Out	7 lmg, 1 mortar	
4th Co	Capt ZIBKE	50		6 lmg, 2 lmg	
2nd Bn	Capt CUPPENKE or KOBISCH	250 (?)			
5th Co	Capt ZSCHOSCH	14			
6th Co	1st Lt HEISEN	50			
7th Co	Lt WEISE	30			
8th Co	Lt WEIMANN	50			
3rd Bn	Capt GRUEN	300 (?)			
9th Co	Capt KRAUSE	50			
10th Co	1st Lt MAIER	60		12 lmg, 2 lmg, 1 x 81mm mortar	
11th Co	1st Lt DELLING	40		2 lmg, 2 lmg, 2 x 81mm mortars	
12th Co	Capt LUTZ	60		9 lmg, 2 lmg	
13th Co				75mm SP guns on Mk II tank chassis	
14th Co		60	2 platoons	3 x 75mm AT guns, 4 x 50mm AT guns	
Regt Hq	Lt Col SCHUEFER	1,000	3 Bns, No 4th Bn reported		
1st Bn	Capt PETZEL				
1st Btry	1st Lt EIKEN				
2nd Btry					
3rd Btry	Capt HEUREUS			4 x 105mm SP on Mk II chassis	
				4 x 105mm SP	
				3 x 105mm SP, 1 in repair	



UNCLASSIFIED

~~U. S. S. F. B. E. E.~~  
~~Equal's British MONI SEONET~~

Unit	Commanding Officer	Approx. Strength	Organization	Armament	Equipment
Hq Co		200	Tank Plat, Signal Plat, Bn Hq	7 Mk II	
1st Bn	Capt GLASGEN	900	3 Lt, 1 Med Co		
Hq Co			Lt Tank Plat, Signal Plat	7 Mk II and 3 Mk III	
1st Co, Lt			3 platoons	15 Mk III	
2nd Co, Lt			3 platoons	15 Mk III	
3rd Co, Lt			3 platoons	15 Mk III	
4th Co, Medium			3 platoons	12 Mk IV	
2nd Bn	Lt Col POST	900	Same as 1st Bn	Same as 1st Bn	
5th Co					
6th Co					
7th Co					
8th Co					

NOTE: (1) Similar to HERMAN GOERING Tank Regt, possibly a 3rd Bn, consisting of 3 Companies with a total of 22 or 31 SP Guns attached to regiment.  
(2) Only 8th Company thus far has been reported in contact since our landing at SALERNO.

~~U. S. S. F. B. E. E.~~  
~~Equal's British MONI SEONET~~

UNCLASSIFIED

~~U. S. S. E. C. R. E. T~~  
~~Equals British MOST SECRET~~

(3) Recapitulation - Total Estimated Strength

<u>Unit</u>	<u>Strength</u>	<u>Location</u>
"M" Battalions	2,500	Coastal Security
SS Reichsfuehrer Brigade	4,000	ROME area
HERMANN GOERING Panzer Division	11,000	SEZZE area
3rd Panzer Grenadier Division	8,000	VELLETRI area
26th Tank Regiment	<u>2,000</u>	ROME area
Total Strength	27,500	
Less AA and Services	<u>6,000</u>	
Total Combat Strength	21,500	

(4) Fighting Efficiency:

- (a) Italian "M" Battalions: Personnel for these units before the fall of the Fascist regime were picked for their loyalty to that government. The unit had a political as well as military function. Since the surrender of ITALY, the complex political situation plus the reluctance of all but the more rabid pro-fascists to continue to fight on the side of GERMANY makes the military value of these units questionable.
- (b) German Units: Probably 20 to 30 per cent of the personnel of German units encountered will be non-German. This element is not eager to fight and in some cases has had little battle experience. However, the non-Germans are not massed, but are intermingled with experienced German soldiers, and fight under German officers and non-commissioned officers. This supervision has, in the past, been effective in making the non-German elements resist strongly.

The HERMAN GOERING Panzer Division has a nucleus of survivors of the SICILIAN Campaign and of the first two months of this campaign, which, coupled with its extra equipment, make it one of the most capable divisions in Southern ITALY.

(5) Coastal Defenses:

- (a) It is estimated that both beaches are mined.
- (b) PELLICCIONE Beach No. F-1-a, from aerial photographs, appears to be free of fixed beach defenses. (See Enemy Defense Overlay, Inclosure No. 1)
- (c) TEVERE Section Beach No. G-3-a, from aerial photographs has three machine gun positions between F784280 and F787275, and some entrenchments at TORRE de S. LORENZO (F785281) (See Enemy Defense Overlay, Inclosure No. 1)
- (d) Table of Fire Power:

~~U. S. S. E. C. R. E. T~~  
~~Equals British MOST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~U. S. S E C R E T~~  
~~British MOST SECRET~~

	Beach G-3-a	Affecting Both Beaches	Beach F-1-a
CD Guns (6")	10 (2 btry)	3 (1 btry)	2 (1 btry)
DP Guns (4")	4 (1 btry)	4 (1 btry)	
Field Guns		4 (1 btry)	4 (1 btry)
Pillboxes	3	1	10
AT Guns			2
Mortars			13
MG'S	5		23
Hy AA	4	14	
Lt AA	2	14	3
Strongpoint	1		
<u>Unoccupied Batteries</u>			
CD Guns	2 (1 btry)	44 (11 btrys)	
DP Guns		13 (3 btrys)	
Hy AA		4 (1 btry)	11 (3 btrys)
Lt AA	10 (3 btrys, plus 2 single guns)		5 (2 btrys)
(6)	Air Forces: German Air Force Order of Battle as of 15 November 1943, is estimated as follows:		

	ITALY	Southern FRANCE	GREECE, CRETE AND DODECANESE	ALBANIA AND YUGOSLAVIA	TOTAL
Long range bombers (JU 88, Do 217, HE 111)	180	120	130	35	465
Bomber, Recce. (JU 88, JU 86, Me 210/210)	20	15	20		55
S/E Fighters and Fighter Bombers (ME 109, FW 190, MA 202/205)	185	10	50		245
Tac/R (ME 109, ME 110) 10			10	30	50
Dive Bombers (JU 87)			60	35	95
T/E Fighter (JU 88)			10		10
Coastal (Arado 196)	10	10	50		70
Total:	405	155	330	100	990

~~U. S. S E C R E T~~  
~~British MOST SECRET~~

UNCLASSIFIED



~~U. S. S E C R E T~~  
~~Equals British MOST SECRET~~

### 3. TERRAIN:

#### a. General Nature of the Terrain:

- (1) General Description: The area considered in this study is bounded by PT. TORRE ASTURA (F970122), CISTERNA (G020325), Route No. 7, FRASCATI (F9057) including COLLI LAZIALI (MT. ALBANO), ROME, thence down the TIBER River to the sea. It is, in general, a low plateau area, dipping off on the southern end into the low PONTINE MARSHES with the north central section rising sharply to the round volcanic mass COLLI LAZIALI. Along the sea the area becomes swampy at its northwest end.
- (2) Drainage System: The principal river is the TIBER on the northern boundary. This is a major river and constitutes a definite obstacle. The secondary streams are the ASTURA on the southern boundary, and the NICASTRO in the center of the area, both rising in the higher reaches of COLLI LAZIALI. Except in the rainy season these secondary streams are fordable or suitable for Bailey bridge crossings. Lesser drainage lines tend axially west and south toward the sea from COLLI LAZIALI.
- (3) Communications:
  - (a) Railroads: There is a double tracked, standard gauge, electrified railroad running from the southern end of the area to ROME. Also, there is a single track, standard gauge railroad making a half circle around COLLI LAZIALI and thence to ROME. Also a single track, standard gauge, electrified line from ANZIO - NETTUNO on the sea to join the main line near STAZ DI CAMPOLEONE.
  - (b) Roads: There is a reasonably good network of roads within the area. The principal ones leading to ROME are from LITTORIA on the south; from ANZIO - NETTUNO on the coast; from LIDO DI ROMA on the coast at the mouth of the TIBER; and Route No. 7 from the PONTINE MARSHES. The balance of the roads are secondary but considered useable for military traffic.
- (4) Ports: ANZIO - NETTUNO (F8517) is a twin-city resort town 30 miles southeast of the mouth of the TIBER River. It is served by a branch railroad line which connects with the main coastal line from NAPLES to ROME. A highway parallels the railroad.
  - (a) Port Facilities:
    - (1) PORTO D'ANZIO is a small harbor formed by a dog-legged mole running SSE and ESE approximately. Harbor is exposed to the southeast and has narrow entrance channel with a least-charted depth of 16 feet.
    - (2) The outer leg of the mole, known as MOLO INNOCENZIANO is quayed on its inner side. Length of quay is about 965 feet. Depth of water alongside varies from 11 to 13 feet and quays are approximately 5 feet above water level. This quay should be suitable for discharge of LCT's and LST's direct.

~~U. S. S E C R E T~~  
~~Equals British MOST SECRET~~

~~U S S E C R E T~~  
~~Equals British MOST SECRET~~

- (3) The inner leg of the mole, known as MOLO NERONIANO has a quayed length of 920 feet. The seaward 400 feet has depths alongside of at least 13 feet. This appears suitable for direct discharge of both LCT's and LST's. It is unlikely that anything larger than an LCT could use the inshore portion of this mole because of shoal water.
- (4) Immediately east of the root of the mole is a stretch of embanked beach and a small craft slip. The total length of this is approximately 200 feet and it offers a possible discharge point for LCT's or LSI(L)'s. Height of quay not known, but unlikely to exceed 5 feet. Eastward of this last quay and slip is a small craft basin. It is extremely shallow and of no value for anything except wet-shod landing from LCA's or LCV(P)'s.
- (b) Capacity: Estimated capacity of port is 475 short tons per day, based on a 24 hour day and an undamaged port.
- (c) Facilities: No cranes, tugs or lighters.
- (d) Storage: No information on closed storage. Open storage is limited.
- (e) Railways: To root of mole only.
- (5) Water Supply: Springs and wells, both of which are numerous, are the important, readily-available, sources of water within the area. The streams, in addition, are a satisfactory source of useable water.
- (6) Area suitable for Mechanized Force Operations: The entire area, except for the higher slopes of COLLI LAZIALI, is considered suitable for cross-country movement. The streams, 20 to 80 feet wide, radiating south and southwest from COLLI LAZIALI, present minor obstacles.
- (7) Beaches:
  - (a) Beach No. F-1-a:
    - (1) Beach No. F-1-a (943146-928158) stretches northwest-southeast for about 2100 yards. Beach is sandy and average width is 15 to 30 yards; it is backed by a shallow slough, 30 to 60 feet wide. The slough is backed by semi-consolidated dunes and rough ground with rock outcrops. Beach is intersected by several small streams. Inland of the beach, and at a distance of 600 to 1,000 yards from it, runs a metalled road to NETTUNO and ANZIO.
    - (2) Gradient: The charted underwater gradient to a depth of 16 feet varies from 1:50 to 1:95. There appears to be a slight shelving of the sea bottom at 500 yards offshore. At 450 yards offshore there is an ill-formed bar which is likely subject to considerable shifting and may have as much as 6 or 8 feet of water over it on some days and not more than 4 or 5 feet on others. The charted gradients and photographs indicate an uneven sea bottom.

~~U S S E C R E T~~  
~~Equals British MOST SECRET~~

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

- (3) Approach: It is probable that there are mine fields in the area of approach. Beach is exposed to the southwest; on-shore winds would probably cause a troublesome surf.
- (4) Exits: Personnel should be able to make exit anywhere along the beach and thence over open country to the coastal road. No direct exits for vehicles exist; it is possible to prepare exits by bridging the slough and thence construction of roads up over the rock-studded slopes to the main road.
- (5) Suitability for Landing Craft: Beach is suitable for LCA's and LCV(P)'s and probably for LCI(L)'s and LCT's. After reconnaissance it should be possible to find suitable beaching points for LST's at south end of beach.
- (6) Suitability for Landing:
  - (a) Personnel - Yes
  - (b) MT ) Probably yes, vehicles should be water-
  - (c) A.F.V. ) proofed to at least 4 feet.
- (7) Suitability for Beach Maintenance: Limited and restricted exits from beach make over-beach maintenance difficult.
- (8) Port Facilities: Nil; nearest one is ANZIO.
- (9) Terrain: Flat, open land, with numerous wet depressions, in rear of main beach road. In hinterland, especially to NNW, there are numerous, irregular, scattered patches of woods between intensely cultivated fields. ASTURA River would prove a major obstacle to movement southward. Movement westward towards NETTUNO and ANZIO should be easy. Maximum length runway at NETTUNO airfield about 900 yards.
- (10) Conclusions:
  - (a) Beach is suitable for LCA's and LCV(P)'s; probably for LCI(L)'s and LCT's; and, after reconnaissance, LST's at the south end of beach.
  - (b) Beach will be difficult to locate.
  - (c) Onshore winds will cause troublesome surf.
  - (d) Difficult exits will require much preparation to reach good road net in rear of beach.
- (b) Beach No. G-3-a:
  - (1) Beach No. G-3-a runs northwestward from F810238 to F783280 for a distance of 5,600 yards. It is a sandy beach, probably soft, of width varying from 30 to 60 yards. It is backed for the major part of its length by a belt of low, scrub-covered dunes about 150 yards wide. The dunes are intersected by numerous minor streams. A metalled, two-way road runs approximately parallel to the coast 500 to 800 yards inland.

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

UNCLASSIFIED

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

- (2) Gradient: Varies from 1:100 to 1:135, averaging 1:110. There are indications of an irregular bar at an average distance of 75 yards offshore; there is another bar at an average distance of 200 yards offshore. The inner bar may be an obstacle; the outer one is not an obstacle to landing craft.
- (3) Approach: Approach is clear from seaward. Lack of landmarks makes identification of beach difficult; navigational aids would be required. Area of approach is probably mined. Beach is exposed to south and southwest swells. Onshore winds would tend to seriously hamper landing operations.
- (4) Exits: Good road exits are not available. There are tracks at F783278, at F790269 and at F808240. These lead to the metalled road parallel to the coast and 500 to 800 yards inland. These tracks can probably be made passable for motor transport by slight bulldozing and laying of Sommerfeld track.
- (5) Suitability for Landing Craft: Beach is suitable for LCA's and LCW(P)'s. The front end of LCT's would ground 330 feet offshore in approximately 3 feet of water. The LST's would ground with their front ends 717 feet offshore with approximately 5 feet of water under the bow. Accordingly the beach is not suitable for LST's unless 300 to 400 feet of suitable pontoon can be provided at each unloading point.
- (6) Suitability for Landing:
  - (a) Personnel - Yes; wet-shod
  - (b) MT - No, unless pontoon is available.
  - (c) AFV - Doubtful, unless pontoon is available.
- (7) Suitability for Beach Maintenance: After considerable preparation of exit roads, the beach could be made suitable for moving all supplies inland. An extra Engineer Company should be attached for use on beach roads only if supplies are to be landed over this beach in quantity.
- (8) Port Facilities: Nil. ANZIO might possibly be used, at a later date, by LST's. One very small coaster seen anchored inside breakwater on the 21st of October.
- (9) Terrain: Hinterland consists of cultivated fields and scattered woods. Main highway north from ANZIO is 4 miles east of beach. There is a canalized stream, built like an AT ditch, running north from F786281.
- (10) Conclusions: Not a good beach but useable if pontoons are made available. Personnel would be landed wet-shod initially; vehicles would have to be waterproofed for depths of 4 to 5 feet. Onshore winds would cause a surf that would hamper landing operations. Beach is recommended, with above reservations, for one division.

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

b. Military Aspect of the Terrain:

- (1) Mountains: COLLI LAZIALI with its high circular cone and its rugged slopes, presents a definite obstacle to movement and occupies a commanding position from view-point of observation, fire, and attack from higher ground.
- (2) Rivers: Except for the TIBER, the rivers are not serious obstacles in the summer and early fall. Flash floods during late fall and winter would make obstacles of the smaller rivers for short periods.

c. Tactical Effects of the Terrain:

- (1) ANZIO - NETTUNO, the only port in the entire area, should be captured early in the operations. It is suitable for the support of one reinforced division for a limited time.
- (2) Due to the commanding position of COLLI LAZIALI early occupation of this feature is vital to the security of a limited force landed in the vicinity of ANZIO - NETTUNO.
- (3) The flat nature of the area, interrupted only by a few small radial streams, permits use of small armored elements.

#### 4. WEATHER.

a. Ground Forces:

- (1) General: December in the ROME south area provides the most unfavorable weather conditions of the year for combined military operations. It is the culmination of the autumnal rainy season. The frequent passage of barometric lows from Western to Eastern Mediterranean brings about a combination of precipitation, cloudiness, and cold unequaled throughout the rest of the year. Three wet months produce a soil surface often unsuitable for maneuvering mechanized equipment. Rivers and marshes are at their flood height. Conditions of temperature and humidity, though by no means severe, are such that require extra clothing and fuel for the efficient operation of troops. On the other hand, these same weather elements may be of great tactical use to an invading force. The thick weather attending the passage of a depression might provide excellent cover for a landing assault. Also, low ceilings and poor visibility might provide protection from air detection or attack at critical junctures. Meteorological conditions, in the ROME south area, nevertheless, appear more promising than in any other sector of enemy held territory in this theater. In short, it may be said that December is an unfavorable month in a favorable sector.
- (2) Detail:
- (a) Temperature: December with an average temperature of  $46.4^{\circ}$  is the second coldest month of the year, being exceeded only by January ( $44.6^{\circ}$ ). The mean daily maximum is  $54^{\circ}$  and the mean daily minimum  $41^{\circ}$ , giving an expected daily range of only  $13^{\circ}$ . Anti-freeze solutions must be on hand as one out of every 10 days will record below freezing temperature.

~~U. S. SECRET~~  
~~Foreign Disposition~~ **SECRET**

UNCLASSIFIED

~~U. S. S. E. C. R. E. T~~  
~~Equals British MOST SECRET~~

The extremes to be expected, however, are moderate. In an average year the monthly maximum will be 61° and the monthly minimum 27°. The absolute highest ever recorded in December at ROME was 70°, the lowest on record is 16°. Temperatures will become more extreme the further one progresses inland among the mountains and northward along the coast.

- (b) Precipitation: December is a wet month. The average catch of 3.86 inches is exceeded only by October and November. Since most of the precipitation is of the showery type, great deviations from the normal may be expected. In the wettest year on record 10.79 inches of rain fell, while in one December only 9.04 inches were registered. Precipitation will fall on an average of 12 days during the month, the same as October and November. Heavy falls are rather infrequent - amounts of over .50 inches may be expected on 3.2 days during the month. Precipitation in other forms is unusual. Snow will fall in ROME only once every three Decembers, while hail is observed twice in every three typical Decembers. One thunderstorm can be expected. Precipitation is slightly greater in mountain areas than on the immediate coast.
- (c) Winds: The prevailing wind in December is from the west and north. Winds from the northern quadrant blow approximately 40% of the time, and from the western quadrant 39%. Average velocity is highest for the year - mean velocity is 12.5 knots. The daily maximum comes at 1400A, and the minimum at midnight when often an absolute calm exists. Winds of gale force (force 8 or over) 6% of the time. Velocities may be somewhat higher at the base of the first ridge of mountains than along the plain and seacoast.

#### Ocean Area

Position of 40° - 45° N. latitude; 10° - 15° E. longitude; years covered 1882-1933 Greenwich Noon Observations

Month	Numbered of observations surveyed	Mean velocity (Knots)	WIND										WEATHER									
			Percentages of Observations from										Percentages of Observations recording									
			North	Northeast	East	Southeast	South	Southwest	West	Northwest	Calm	Haze	Mist	Fog	Drizzle	Rain	Showers	Thunderstorms	Heavy Squalls	Gales (force 8 or over)	Exceptional visibility	Mean Cloud Amount (0-10)
Dec.	112	12.5	12	18	11	6	10	13	15	11	4	6	0	0	1	6	5	1	0	6	5	5.6
Jan.	116	9.3	10	19	16	12	9	9	7	13	5	5	1	0	0	8	8	2	1	2	10	5.6

Source of Table: H.O. No. 152, "Sailing Directions for the Mediterranean," Volume II, 1941.

~~U. S. S. E. C. R. E. T~~  
~~Equals British MOST SECRET~~

UNCLASSIFIED

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

- (d) Cloudiness and Moisture: There is more moisture in the air than in any other month. The relative humidity is highest and the amount of sunshine the lowest. The average humidity of 74% at 0700A is high, but not uncomfortably so in view of the relative coolness of the temperature. Sunshine averages 107 hours - the lowest of the year - yet there is hardly a day that the sun does not shine. Average cloudiness is 57%. Cloudiness is somewhat cyclical in that a series of two or three days will produce a great quantity of clouds to be followed by three to four days of almost cloudless skies. Fogs and mists are infrequent with only 1.8 days of fog observed. In mountain valleys ground fog is common early in the morning following a clear, cool night. This dissipates rapidly in the sunlight, soon after dawn.
- (e) Visibility: Visibility is generally good. Battle dust is seldom a limiting factor at this time of the year. The SIROCCO with its thick atmosphere, so common in Southern ITALY, occurs less than once a month in this area. Precipitation is the chief deterrent to good visibility, but its occurrence is usually of short duration. Ground fog in the mountain valleys will obscure horizontal sight for short periods around dawn, though it will cover only a limited area.
- (f) Snow: The permanent winter snow line (December to March) in the area east and south of ROME is no lower than 1,500 meters. There should be no snow problem in the area of the proposed operation. When snow does occur in this region it is light and of short duration.

b. Aviation:

- (1) General: Ceiling, visibility, and sky coverage - the three limiting factors in tactical air support - combine to make December the poorest month of the year for air activity. Furthermore, a soil saturated by three months of heavy rain will provide unsuitable landing surfaces on several days per month. Once a plane is in the air, it will find an atmospheric handicap about 50% of the time.
- (2) Detail:
  - (a) Ceiling: Ceiling (technically, the height of clouds covering more than 5/10 of the sky) is a factor of prime importance in all light and medium bombardment activity. Cloudiness averages 57% in December, and a good part of this is below 10,000 feet (the critical level for the above type of bombardment.) There is seldom, however, a day that does not have at least large breaks in the cloud layer. Conditions on the coast will ordinarily be more favorable for targets than in the first range of hills. The higher mountains may often be above the level of the clouds. On many days during this month the prospect of finding a chosen target will be a matter of chance.
  - (b) Visibility: Visibility is generally good. The chief limiting factor is precipitation attendant the passage of a cold front. Haze levels are infrequent at this time of the year, permitting excellent verticle visibility.

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~U. S. S. E. C. R. E. T~~  
~~Equals British MOST SECRET~~

(c) Icing: Icing is a real hazard which commences to make itself felt this month. Both clear and rime icing may be experienced as low as 5,000 feet, in a continental air mass following the passage of a cold front. This danger is much more serious to heavy bombers operating at long distances from friendly bases.

(d) Almanac: December 1943. ROME 42°00' N 12°30' E.

	<u>SUNRISE</u>	<u>SUNSET</u>	<u>TWILIGHT*</u>	<u>MOONRISE</u>	<u>MOONSET</u>
December 1	0721	1640	1711	1049	2042
2	0722	1640	1711	1137	2150
3	0723	1639	1710	1219	2300
4	0724	1639	1710	1257	----- 1st QUARTER
5	0725	1639	1710	1331	0009
6	0726	1639	1710	1403	0116
7	0728	1639	1710	1435	0223
8	0729	1639	1710	1508	0329
9	0730	1639	1710	1543	0434
10	0731	1639	1710	1620	0537
11	0731	1639	1710	1702	0639 FULL MOON
12	0732	1639	1711	1748	0738
13	0733	1639	1711	1838	0831
14	0734	1639	1711	1931	0919
15	0735	1640	1711	2026	1002
16	0736	1640	1711	2122	1040
17	0736	1640	1712	2218	1114
18	0737	1640	1712	2315	1144
19	0738	1641	1712	-----	1213 LAST QUARTER
20	0738	1641	1713	0013	1241
21	0739	1642	1713	0111	1309
22	0739	1642	1714	0211	1339
23	0740	1643	1714	0314	1411
24	0740	1643	1715	0418	1448
25	0741	1644	1715	0525	1531
26	0741	1644	1716	0632	1621
27	0741	1645	1717	0738	1719 NEW MOON
28	0742	1646	1717	0838	1825
29	0742	1646	1718	0931	1935
30	0742	1647	1719	1018	2047
31	0742	1648	1719	1058	2158

All times are "A" time for 15°00' E.

\* Civil twilight (Sun 6° below horizon.)

Compiled from Nautical Almanac, 1943.

#### 5. ENEMY CAPABILITIES.

a. Against a landing operation in the NETTUNO area the enemy is capable of opposing the landing according to the following schedule:

- (1) Inasmuch as there are not very many suitable beaches along the south coast of CIVITAVECCHIA, it is estimated that the enemy will have sufficient forces to defend the beaches, which may consist of combat groups of the size of about one battalion, reinforced. Between CIVITAVECCHIA and NETTUNO it is estimated that one Panzer Grenadier Division will have the responsibility of defense of the beaches. NETTUNO has, in the past, been a Naval Station, and therefore could be expected to have reserves within supporting distance to defend it. During D day the landing could be resisted by the remainder of a Panzer Grenadier Division, estimated to be the 3rd and reinforced by the SS Brigade Reichsfuhrer, an Panzer Grenadier

~~U. S. S. E. C. R. E. T~~  
~~Equals British MOST SECRET~~

UNCLASSIFIED



UNCLASSIFIED

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

Brigade, and a regiment of tanks. With a feint at some place along the coast line other than the point of landing, it is possible that some of the force indicated above as being available to resist the landing might be diverted.

- (2) A reserve division, which may be expected to be located in the area east of SEZTE, may also be available for resisting the amphibious attack. It is estimated that that division would be available to reinforce the immediate defenses of the beaches within 36 hours after H hour.

b. It is possible that in case the Eighth Army makes a successful advance as part of all of the reserves now available to the enemy as indicated above, may be transferred to the Eighth Army front. It is also possible that one or more enemy divisions may be withdrawn from the front of the Fifth Army and transferred to the Eighth Army front or elsewhere. It is impossible to predict the regrouping of units by the enemy which may result from the attack of the Eighth Army. Therefore, a detailed estimate or prediction of the enemy situation which may exist at the time of the landing operation, is impossible. The estimate of the enemy situation will probably be revised frequently between now and the time of the operation.

c. It is estimated that the recent weakening of German forces in Northern ITALY will influence the reinforcements which may be available for Southern ITALY from that area, including one division which is probably on its way South a maximum of two divisions may be available for reinforcing the German Tenth Army defending Southern ITALY.

*Edwin B. Howard*  
EDWIN B. HOWARD  
Colonel, G.S.C.  
A.C. of S., G-2

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~U S SECRET~~  
~~Equals British MOST SECRET~~

INCLOSURE NO. 2 to APPENDIX NO. 1

MEDICAL AND SANITARY DATA ON ROME SOUTH AREA OF ITALY

~~U S SECRET~~  
~~Equals British MOST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~U. S. S. E. C. R. E. T~~  
~~Equally British MOST SECRET~~

HEADQUARTERS FIFTH ARMY  
Office of the Surgeon  
A. P. O. #464, U. S. Army

MEDICAL AND SANITARY DATA ON ROME SOUTH AREA OF ITALY

1. General:

a. Sanitation among the natives in this area is poor, and transmissible diseases are a serious problem. Available supplies of food and dairy products are insufficient to meet the needs of the native people. Vegetables are frequently fertilized with night soil, which accounts, in part, for the high rate of enteric diseases. Dairy products are subject to contamination. There are few pasteurization plants, and dairy animals frequently have tuberculosis or undulant fever. Animals with trichinosis, echinococcosis, taenia saginata infestation, taenia soleum infestation, as well as tuberculosis and the various forms of brucellosis are slaughtered and sold for human consumption. Adequate supplies of water are obtainable from streams. All water must be considered non-potable until chlorinated in the prescribed manner or boiled. Indiscriminate pollution of the soil is of common occurrence, particularly in the rural districts.

b. Malaria should not be a problem during the winter months in this area. The enteric diseases, typhoid fever, paratyphoid fever, bacillary dysentery and amoebic dysentery, will be encountered. During this period of the year coughs, colds, pneumonia and influenza will create a serious problem unless strict precautions are observed by unit commanders. Other diseases of importance to troops in this area are measles, diphtheria, whooping cough, scarlet fever, encephalitis, lethargica, trench foot, the venereal diseases, undulant fever, typhus fever, poliomyelitis, tetanus, anthrax, rabies and gas gangrene.

2. Diseases of Special Importance.

a. Venereal Diseases. Syphilis, gonorrhea, chancroid, lymphogranuloma inguinale and granuloma venereum are found throughout Italy. Recent statistics are unreliable. Prostitution is controlled by police laws requiring segregation and medical examination at weekly intervals.

b. Acute Respiratory and Infectious Diseases. December with an average temperature of 46.4° is the second coldest month of the year, being exceeded only by January (44.6°). December is one of the wet months. This combination of cold and dampness will cause an increase in the respiratory infections.

c. Typhus Fever. This disease is transmitted by the body louse. It is a disease of the cold months, when bathing and washing of clothes are infrequent, and troops are likely to crowd into louse infested shelters.

d. Trench Foot. This is a disease that was common in the last war in soldiers who were compelled to remain for long periods in cold, wet trenches with prolonged wetting and chilling of the feet. It may be expected to appear again under similar conditions of combat.

For the Surgeon:

*C. F. St. John*  
C. F. ST. JOHN  
Lt. Col., M.C.  
Asst. Surgeon

~~U. S. S. E. C. R. E. T~~  
~~Equally British MOST SECRET~~

UNCLASSIFIED

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

HEADQUARTERS FIFTH ARMY  
A. P. O. #464, U. S. Army

.....  
: ~~SECRET~~ :  
:Auth: CG Fifth Army :  
:Initials: *EBH* :  
:Date: 7 January 1944 :  
:.....:

APPENDIX NO. 2 (CORRECTED COPY. Destroy Copy dated 25 November 1943)

to  
ANNEX NO. 1  
to  
Outline Plan SHINGLE

COPY NO. 82

7 January 1944

1. Geographical Code for Operation SHINGLE

a. There follows a list of place code names to be used in connection with the planning of Operation SHINGLE.

b. The policy governing the use of this geographical code is as follows:

- (1) Code names will be used instead of the actual names in all messages and memoranda dealing with the operation up to D-Day.
- (2) If it is necessary to refer to a place for which no code name exists, the place name itself will be used.
- (3) Code names will be used in conversations and telephone communication care being taken to avoid other references by which the code names may be identified.
- (4) They will not be used for the marking of shipments.
- (5) Appreciations, outline plans, appendices, and operation orders will be in clear.

c. For reasons of security, the distribution and circulation of this list will only be made to those who require knowledge of the complete list.

d. The below listed names cover only the main places and features to which references may be made by all concerned in planning. These code names will be used by this headquarters and its lower echelons as well as by Army Headquarters inclusive upwards. No other geographical code names will be adopted by Army Headquarters for use with higher echelons without reference to Headquarters 15th Army Group.

ENCODE

<u>PLACE NAME</u>	<u>CODE NAME</u>	<u>PLACE NAME</u>	<u>CODE NAME</u>
ANZIO (F 8517)	COMPOSURE	LIDO DI ROMA (G 5748)	RUSHTON
CISTERNA DI LITTORIA (G 0232)	BALLINDON	LITTORIA AIRFIELD (G 0279)	EYELASH
COLLI LAZIALI (MT. ALBANO) (F 9550)	GRIFFITH	NAPLES (M 2149)	CURIOUS
F. TEVERE (R. Tiber)	VERBIAGE	NETTUNO (F 8818)	ADDENDUM
FRASCATI (F 9056)	APPROACH	PONTINE MARSHES	BERTRAM
FROSINONE (G 4638)	COMMISSION	ROME (F 7267)	BOTANY
GAETA (M 6688)	ACCOMPLISH	SEZZE AIRFIELD (G1921)	FLINTSHIRE
LAGO ALBANO (F 8950)	BURBAGE	TERRACINA (M 3799)	HOLLOW

~~U. S. SECRET~~  
~~Equals British MOST SECRET~~

UNCLASSIFIED

~~U. S. S E C R E T~~  
~~Equals British MOST SECRET~~

<u>PLACE NAME</u>	<u>CODE NAME</u>	<u>PLACE NAME</u>	<u>CODE NAME</u>
VELLETRI (F 9843)	DISCOURSE	VIA APPIA	GRACEHILL
VIA ANZIATE	HOGMANAY	VIA CASILINA	ARDUOUS

DECODE

<u>CODE NAME</u>	<u>PLACE NAME</u>	<u>CODE NAME</u>	<u>PLACE NAME</u>
ACCOMPLISH	GAETA (M 6688)	CURIOUS	NAPLES (M 2149)
ADDENDUM	NETTUNO (F 8818)	DISCOURSE	VELLETRI (F 9843)
APPROACH	FRASCATI (F 9056)	EYELASH	LITTORIA AIRFIELD (G 0279)
ARDUOUS	VIA CASILINA	FLINTSHIRE	SEZZE AIRFIELD (G 1921)
BALLINDON	CISTERNA DI LITTORIA (G 0232)	GRACEHILL	VIA APPIA
BERTRAM	PONTINE MARSHES	GRIFFITH	COLLI LAZIALI (MT. ALBANO)(F955C)
BOTANY	ROME (F 7267)	HOGMANAY	VIA ANZIATE
BURBAGE	LAGO ALBANO (F 8950)	HOLLOW	TERRACINA (M 7399)
COMMISSION	FROSINONE (G 4638)	RUSHTON	LIDO DI ROMA (G 5748)
COMPOSURE	ANZIO (F 8517)	VERBIAGE	F. TEVERE (R. Tiber)

e. The below listed names will be used by this headquarters and its lower echelons, but in no case will they be used in relation with a higher headquarters. A lower echelon may use its own code names in addition, but only within the echelon.

ENCODE

<u>PLACE NAME</u>	<u>CODE NAME</u>	<u>PLACE NAME</u>	<u>CODE NAME</u>
ALBANO (F 8848)	AUGUSTA	FREGENE (F 5062)	EL PASO
ARDUA (F 7935)	MIAMI	GALLICANO (G 0163)	FRESNO
ARICCIA (F 8947)	BATTLE CREEK	GENZANO (F 9045)	BIRMINGHAM
ARTENA (G 0949)	LANCASTER	GROTTAFERRATA (F 8954)	GRANT'S PASS
BORGO PIAVE (G 0520)	NEW HAVEN	LA BANCA (F 9513)	PHILADELPHIA
CANALE MUSSOLINI	BLUEFIELD	LABICO (G 0754)	GETTYSBURG
CAPRANICA (G 1262)	BRANDYWINE	LADISPOLI (F 4073)	GREENSBOROUGH
CARPINETO (G 2434)	CAMDEN	LANUVIO (F 9142)	CALGARY
CASAPE (G 0767)	CROSCENT CITY	L. DI FOGLIANO (G 0711)	LOUISVILLE
CASSINO (G 8521)	FOCHESTER	L. DEI MORACI (G 1109)	MANCHESTER
CASTEL CANDOLFO (F 8749)	ATLANTA	L. DI NEMI (F 9246)	MONTEREY
CASTELLEMARE DI STABIA (N 4130)	ASHLAND	LE GROTTACCIE (F 9315)	NEWFOUNDLAND
CASTEL MADAMA (G 0675)	CRABTOWN	LITTORIA (G 0819)	OTTAWA
CASTEL A. PIETRO (G 0860)	CLEVELAND	MARINO (F 8852)	BANNOCK
CAVE (G 1158)	LEAVENWORTH	M. CERASO (G 0054)	ORLANDO
CECCANO (G 4530)	YORKTOWN	MONTE COMPATRI (F 9556)	CRATER LAKE
CERVETERI (F 4278)	CHARLOTTE	MONTELANICO (G 2039)	HAMILTON
CICILIANO (G 1173)	CHARLESTON	M. PESCHIO (F 9747)	PONTIAC
COLONNA (F 9659)	DEL MONTE	MONTE PORZIO CATONE (F 9357)	CORNWALL
CORI (G 0938)	PASADENA	MT. RUFFI (G 1575)	RICHMOND
F. ASTURA	CARSON CITY	MT. PRENESTINI (G 1065)	SACRAMENTO
FERENTINO (G 3844)	QUEBEC	MT. TIBURTINI (G 0574)	SALINAS
FIUMICINO (F 5253)	CANTON	NEMI (F 9346)	CHICAGO
FORMIA (M 6794)	YUMA	NORMA (G 1431)	SAN FRANCISCO

~~U. S. S E C R E T~~  
~~Equals British MOST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~U. S. S. E. C. R. E. T~~  
~~Equals British MOST SECRET~~

<u>PLACE NAME</u>	<u>CODE NAME</u>	<u>PLACE NAME</u>	<u>CODE NAME</u>
OSTIA LIDO (F 5748)	SANTIAGO	SESSANO (G 0423)	NORFOLK
PALESTRINA (G 0860)	HIGHLAND FALLS	SEZZE (G2222)	PRINCETON
POLI (G 0865)	SAVANNAH	S. GREGORIO DA SASSOLA (G 0668)	COLOMBIA
PRIVERNO (G 3219)	RENO	TIVOLI (G 0074)	DETROIT
ROCCA DI CAVE (G 1260)	SCRANTON	TORRE ANNUNZIATA (N 3738)	DANVILLE
ROCCA DI PAPA (F 9251)	CINCINNATTI	TORRE ASTURA (F 9612)	DURHAM
ROCCAGORGA (G 2925)	SOUTH BEND	TORRE CALDARA (F 8222)	LANSING
ROCCAMASSIMA (G 1042)	LOS ANGELES	VALMONTONE (G 1053)	KALAMAZOO
ROCCA PRIORA (F 9755)	DENVER	VATICAN CITY (F 7267)	ASTORIA
SAMBUCI (G 1276)	ST. JOHNE	ZAGAROLO (G 0360)	GREEN BAY
SALERNO (N 6631)	BALTIMORE	NETTUNO AIRFIELD (G 9317)	EUREKA
SERMONETA (G 1527)	TAMPA	GENERAL ASSAULT AREA (included in triangle LIDO DI ROMA - MT. ALBANO - SABAUDIA)	CICERO

DECODE

<u>CODE NAME</u>	<u>PLACE NAME</u>	<u>CODE NAME</u>	<u>PLACE NAME</u>
ASHLAND	CASTELLEMARE DI STABIA (N 4130)	GETTYSBURG	LABICO (G 0754)
ASTORIA	VATICAN CITY (F 7267)	GRANT'S PASS	GROTTAFERRATA (F 8954)
ATLANTA	CASTEL GANDOLFO (F 8749)	GREEN BAY	ZAGAROLO (G 0360)
AUGUSTA	ALBANO (F 8848)	GREENSBOROUGH	LADISPOLI (F 4073)
BALTIMORE	SALERNO (N 6631)	HAMILTON	MONTELANICO (G 2039)
BANNOCK	MARINO (F 8852)	HIGHLAND FALLS	PALESTRINA (G 0860)
BATTLE CREEK	ARICCIA (F 8947)	KALAMAZOO	VALMONTONE (G 1053)
BIRMINGHAM	GENZANO (F 9045)	LANCASTER	ARTENA (G 0949)
BLUEFIELD	CANALE MUSSOLINI	LANSING	TORRE CALDARA (F 8222)
BRANDYWINE	CAPRANICA (G 1262)	LEAVENWORTH	CAVE (G 1158)
CALGARY	LANUVIO (F 9142)	LOS ANGELES	ROCCAMASSIMA (G 1042)
CAMDEN	CARPINETO (G 2434)	LOUISVILLE	L. DI FOGLIANO (G 0711)
CANTON	FIUMICINO (F 5253)	MANCHESTER	L. DEI MORACI (G 1109)
CARSON CITY	F. ASTURA	MIAMI	ARDEA (F 7935)
CHARLESTON	CICILIANO (G 1173)	MONTEREY	L. DI NEMI (F 9246)
CHARLOTTE	CERVETERI (F 4278)	NEWFOUNDLAND	LE GROTTACCIE (F 9315)
CHICAGO	NEMI (F 9346)	NEW HAVEN	BORGO PIAVE (G 0520)
CICERO	General Assault Area (Included in triangle LIDO DI ROMA-MT ALBANO-SABAUDIA)	NORFOLK	SESSANO (G 0423)
CINCINNATTI	ROCCA DI PAPA (F 9251)	OTTAWA	ORLANDO M. CERASO (G 0054)
CLEVELAND	CASTEL A. PIETRO (G 0860)	PASADENA	LITTORIA (G 0819)
CRABTOWN	CASTEL MADAMA (G 0675)	PHILADELPHIA	CORI (G 0938)
CRESCENT CITY	CASAPE (G 0767)	PONTIAC	LA BANCA (F 9513)
COLOMBIA	S. GREGORIO DA SASSOLA (G 0688)	PRINCETON	M. PESCHIO (F 9747)
CORNWALL	MONTE PORZIO CATONE (F 9357)	QUEBEC	SEZZE (G 2222)
CRATER LAKE	MONTE COMPATRI (F 9556)	RENO	FERENTINO (G 3844)
DANVILLE	TORRE ANNUNZIATA (N 3738)	RICHMOND	PRIVERNO (G 3219)
DEL MONTE	COLONNA (F 9659)	ROCHESTER	MT. RUFFI (G 1575)
DENVER	ROCCA PRIORA (F 9755)	SACRAMENTO	CASSINO (G 8521)
DETROIT	TIVOLI (G 0074)	SALINAS	MT. PRENESTINI (G 1065)
DURHAM	TORRE ASTURA (F 9612)	SAN FRANCISCO	MT. TIBURTINI (G 0574)
EL PASO	FREGENE (F 5062)	SANTIAGO	NORMA (G 1431)
EUREKA	NETTUNO AIRFIELD (G 9317)	SAVANNAH	OSTIA LIDO (F 5748)
FRESNO	GALLICANO (G 0163)	SCRANTON	POLI (G 0865)
			ROCCA DI CAVE (G 1260)

~~U. S. S. E. C. R. E. T~~  
~~Equals British MOST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~U. S. S E C R E T~~  
~~Equals British MOST SECRET~~

<u>CODE NAME</u>	<u>PLACE NAME</u>
SOUTH BEND	ROCCAGORGA (G 2925)
ST. JOHN	SAMBUCI (G 1276)
TAMPA	SERMONETA (G 1527)
YORKTOWN	CECCANO (G 4530)
YUMA	FORMIA (M 6794)

*Edwin B. Howard*  
EDWIN B. HOWARD  
Colonel, G.S.C.  
A.C. of S., G-2

~~U. S. S E C R E T~~  
~~Equals British MOST SECRET~~

-4-

UNCLASSIFIED

UNCLASSIFIED

~~SECRET~~

~~Equals British MOST SECRET~~

~~U. S. SECRET SHINGLE  
(EQUALS BRITISH MOST SECRET)~~

COPY NO. 47

HEADQUARTERS FIFTH ARMY  
A. P. O. #464, U. S. Army

12 January 1944

ANNEX NO. 2

OPERATION SHINGLE

PART I

FINAL TROOP LIST

PART II

ORDER OF BATTLE (BRITISH)

PART III

FOLLOW-UP TROOPS (U.S.)

~~SECRET~~

~~Equals British MOST SECRET~~

~~U. S. SECRET SHINGLE  
(EQUALS BRITISH MOST SECRET)~~

UNCLASSIFIED



UNCLASSIFIED

~~U. S. SECRET SHINGLE~~  
~~EQUALS BRITISH MOST SECRET~~~~SECRET~~  
~~EQUALS BRITISH MOST SECRET~~HEADQUARTERS FIFTH ARMY  
A. P. O. #464, U. S. Army

12 January 1944

TROOP LISTANNEX NO. 2 OUTLINE PLANOPERATION SHINGLE

## PART I

NO.	UNIT	T/O	ASSAULT STRENGTH		TOTAL		T/O STRENGTH		TOTAL	
			PERS	VEHS	PERS	VEHS	PERS	VEHS	PERS	VEHS
			<u>ASSAULT CONVOY</u>							
1	Hq & Hq Co, VI Corps	100-1 100-2 7-1-42	250	30			376	36		
2	3rd Inf Div (U.S.)	7-1 6-1-42	13784	1398			15523	12660		
3	1 Inf Div (Br)		15989	1896			17094	13322		
4	* 9 Commando		455	8*			455	8		
5	* 43 Commando		455	7			455	7		
6	504th Precht Inf Regt (Airborne 2,580)	7-31 2-17-42	40	40			2923	120		
7	1st Ranger Bn	Spec 6-1-42	480	8			488	-		
8	3rd Ranger Bn	Spec 11-25-43	480	7			488	-		
9	4th Ranger Bn	Spec 6-1-42	480	7			488	-		
10	509th Precht Inf Bn	7-35 2-17-42	600	5			610	-		
11	1st Bn, 77th FA Regt (155mm How)	6-31 4-1-42					607	157		
12	1st Bn, 36th FA Regt (155mm Gun)	6-51 4-1-42	235	41			681	191		
13	Btry B, 15th FA Obsn Bn	6-75 4-1-42	42	7			169	41		
14	69th Armd FA Bn	6-165 3-1-42 6-166 10-29-42	600	96			741	180		
15	24 Army Field Regt (SP) RA (Br)						772	191		
16	15101 Arty Plat (Br) (24 Army Fld Regt)						44	37		

\* Army Units

UNCLASSIFIED

~~U. S. SECRET SHINGLE~~ ~~SECRET~~ ~~EQUALS BRITISH MOST SECRET~~ UNCLASSIFIED~~EQUALS BRITISH MOST SECRET~~

UNCLASSIFIED

~~U. S. SECRET SINGLE~~  
~~EXCERPTS - BRITISH MOST SECRET~~

NO.	UNIT	T/O	ASSAULT STRENGTH		TOTAL		T/O STRENGTH		TOTAL	
			Pers	Vehs	Pers	Vehs	Pers	Vehs	Pers	Vehs
17	80 Med Regt R.A. (Br)						543	109		
18	1548 Arty Plat (Br) (80 Med Regt)						74	37		
19	655 Air OP Flight (Br)						39	9		
20	751st Tank Bn	17-25 10-2-43	696	120			751	212		
21	46 Royal Tank Regt (Br)						579	185		
22	601st TD Bn	18-25 1-27-43	338	76			673	162		
23	894th TD Bn	18-25 1-27-43					673	162		
24	Det "J" Service		13	5			13	5		
25	TOTAL				34937	3751			45259	7831

CHEMICAL

26	Det, 6th Cml Depot Co with Det 11th Cml Maint Co	3-67 5-28-42	42	3			50	3		
27	83rd Cml Bn (Mtzd)	3-25 4-1-42	172	22			1010	149		
28	84th Cml Bn (Mtzd)	3-25 4-1-42	764	69			1010	149		
29	24th Cml Decon Co (Cld)	3-217 10-12-43	155	14			170	39		
30	TOTAL				1133	108			2240	340

ANTI-AIRCRAFT

31	Hq & Hq Btry, 68th CA Regt (AA)	4-11 4-1-42	71	7			139	21		
32	1st Bn, 68th CA Regt (AA)	4-11 4-1-42	383	42			799	172		
33	2d Bn, 68th CA Regt (AA)	4-11 4-1-42					807	208		
34	441st AAA AW Bn (SP)	44-75 6-15-43	612	93			709	145		
35	106th AAA AW Bn (SP)	44-75 6-15-43	559	71			709	145		
36	690th AAA A/B MG Btry	44-217 8-20-43	84	6			87	4		

UNCLASSIFIED

~~U. S. SECRET ORANGE~~  
~~EQUALS BRITISH MOST SECRET~~

NO.	UNITS	T/O	ASSAULT STRENGTH		TOTAL		T/O STRENGTH		TOTAL	
			PERS	VEHS	PERS	VEHS	PERS	VEHS	PERS	VEHS
			ANTI-AIRCRAFT CONT'D							
37	692d AAA A/B MG Btry	44-217 8-20-43	84	6			87	4		
38	Det, 102 Bar Bln Btry (VLA)	4-327 11-15-42	132	5			147	11		
39	TOTAL				1925	230			3484	710

ENGINEERS

40	36th Engr C Regt (3 Bn Regt)	5-171 4-1-42	899	44			2092	408		
41	39th Engr C Regt	5-171 4-1-42					1465	297		
42	540th Engr Shore Regt	5-171 4-1-42	1315	161			1570	297		
43	3 Beach Group (Br)						2870	298		
44	387th Engr Bn (Sep) (Cld)	5-35 4-1-42	920	2			1117	104		
45	Co B, 405th Engr WS Bn	5-65 4-1-42					120	48		
46	661st Engr Topo Co	5-167 4-1-42					125	32		
47	Det, 1051st Port Reconstruction Co		15	2			27	2		
48	1 Plat, 462d Engr Depot Co						48	8		
49	Det, 2658th Engr Map Depot Co	5-500 7-31-43	10	1			10	1		
50	15 Stores Sec (Br)		14	-			14	-		
51	TOTAL				3173	210			9453	1495

MEDICAL

52	52d Med Bn	8-65 4-1-42	250	38			519	100		
53	33rd Field Hosp	8-510 4-8-43	197	11			228	22		
54	Det, 2d Aux Surg Gp (12 Teams)	8-571 7-13-42	75	5			75	5		
55	93rd Evac Hosp (400 bed)	8-581 7-26-43	246	23			296	45		
56	95th Evac Hosp (400 bed)	8-581 7-26-43	246	23			296	45		

- 3 -

~~U. S. SECRET ORANGE~~ ~~EQUALS BRITISH MOST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~U. S. SECRET SHINGLE~~  
~~FOUO IS BRITISH MOST SECRET~~

NO.	UNIT	T/O	ASSAULT STRENGTH		TOTAL		T/O STRENGTH		TOTAL	
			PERS	VEHS	PERS	VEHS	PERS	VEHS	PERS	VEHS
			MEDICAL CONT'D							
57	1st Sec Adv Plat, 12th Med Depot Co	8-661 4-2-43	33	4			33	4		
58	2 Mob Casualty Clearing Sta		162	25			162	25		
59	25 Fld Surg Unit (Br)						9	2		
60	150 Light Fld Amb (Br)						175	48		
61	2 Secs 485 Fld Serv ACC						22	12		
62	12 Fld Transfusion Unit		4	1			4	1		
63	TOTAL				1213	130			1819	309

ORDNANCE

64	14th Ord MM Co	9-7 3-1-43					169	45		
65	45th Ord MM Co	9-7 3-1-43	100	25			169	45		
66	58th Ord Am Co	9-17 4-1-42	166	8			186	10		
67	66th Ord Am Co	9-17 4-1-42	166	4			186	10		
68	3407th Ord MM Co (Q)	10-27 4-1-42					202	119		
69	Det, 525th Ord HM Co (Tk)	9-37 7-3-43					84	25		
70	Hq & Hq Det, 45th Ord Bn	9-76 3-31-43					37	6		
71	56th Bomb Disp Sq	9-179 11-20-42	7	2			7	2		
72	TOTAL				439	39			1040	262

QUARTERMASTER

73	3853rd QM GS Co	10-57 8-8-43	107	8			115	104		
74	249th QM Serv Bn (-Co B)	10-67 10-7-43	670	3			674	13		
75	1 Plat, 487th QM Co (Ldry) (SM)	10-536 10-167 6-10-43					68	10		
76	94th QM Rhd Co	10-197 10-8-43	179	2			184	8		

- 4 -

U. S. ~~SECRET SHINGLE~~ ~~FOUO IS BRITISH MOST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~U. S. SECRET SHINGLE~~  
~~FOUO IS PRINTED IN MOST SECRET~~

NO.	UNIT	T/O	ASSAULT STRENGTH		TOTAL		T/O STRENGTH		TOTAL	
			PERS	VEHS	PERS	VEHS	PERS	VEHS	PERS	VEHS
			QUARTERMASTER CONT'D							
77	Det, 85th QM Depot Co	10-227 9-6-43	11	1			11	1		
78	2d Plat, 48th QM GR Co	10-297 1-21-42	25	6			25	3		
79	1 Sec 2d Plat, 47th QM GR Co		23	1			23	1		
80	Sec 26 GR Unit (Br)						8	1		
81	2d Plat, Co B, 95th QM Co	Spec					87	22		
82	TOTAL				1015	21			1195	163

SIGNAL

83	57th Sig Bn	11-50 4-1-42	355	60			932	247		
84	74th Sig Co (Spec)		212	23			225	26		
85	Det, 212th Sig Depot Co		26	4			26	4		
86	Det, 817th Sig Port Serv Co						26	4		
87	2 Rad Rep Secs, 180th Sig Rep Co		12	3			23	4		
88	Det, 163rd Sig Photo Co		19	10			21	13		
89	Det, 2d Air Support Com Sqd		49	20			34	8		
90	Det, C, 71st Sig Co (Spec)		6	-			20	5		
91	Det, B, 128th Sig RI Co						79	26		
92	Det E, 849th SIS Co						19	4		
93	Air Support Control, Det, 7/9 AASC						24	7		
94	Det, 215th Air Sup Patrol						20	3		
95	Det, 229th Sig Opn Co Det, 51st Sig Bn		14	5			14 (2 Dukws) 1			
96	#1 Sp Lia Det (Cipher)						5	1		
97	TOTAL				693	125			1468	353

- 5 -

~~U. S. SECRET SHINGLE~~ ~~FOUO IS PRINTED IN MOST SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~U. S. SECRET SHINGLE~~  
~~FOUO IS DRAFT NOT SECRET~~

NO.	n	UNIT	T/O	ASSAULT STRENGTH		TOTAL		ASSAULT STRENGTH		TOTAL	
				PERS	VEHS	PERS	VEHS	PERS	VEHS	PERS	VEHS
				<u>TRANSPORTATION</u>							
98		6723d Truck Group (Prov)Spec		700	500			720	548		
99		* 52d QM Truck Bn	10-56 4-1-42 55-37 8-29-43					651	220		
100		53d QM Truck Bn (-Co A)	Spec	455	200			715	383		
101		239 GT Coy(DUKWS)		237	112			237	112		
102		TOTAL				1392	812			2323	1263

\* Dukws atchd 3rd Inf Div (U.S.), 1 Inf Div (Br), Ranger Bns.

MISCELLANEOUS

103		504th MP Bn (-Co B)	19-35 4-1-42	364	6			490	58		
104		206th MP Co	19-37 4-1-42					197	20		
105		377th MP Escort Guard Co	19-47 4-1-42	130	2			138	4		
106		373 PW Camp (Br)						41	-		
107		Misc		96	8			96	8		
108		PRO		59	5			59	10		
109		#1 Reception Center (Br) Replacements						41 1500	3		
110		U. S. Replacements						1800			
111		11 Field Cash Office						5	2		
112		Det, 10th Port Hq (with 488th Port Bn)		10	3			10	3		
113		488th Port Bn (Liberty Ships)						986	-		
114		TOTAL				659	24			5363	108

AIR CONTROL PARTY

15		GCI Control		211	46			429	109		
16											
17		Spec Det						5	2		
18											
19											
20											
21		TOTAL				211	46			434	111

UNCLASSIFIED

~~U. S. SECRET SINGLE EYES ONLY~~  
~~FOUO - BRITISH MOST SECRET~~

NO.	UNIT	T/O	ASSAULT STRENGTH		TOTAL		T/O STRENGTH		TOTAL	
			PERS	VEHS	PERS	VEHS	PERS	VEHS	PERS	VEHS
			NAVY							
122	1 Beach Co		140	12			140	12		
123	1 Beach Bn		220	10			437	36		
124	TOTAL				360	22			577	48
125	GRAND TOTAL				47150	5518			74660	12993

A. M. GRUENTHER,  
Major General, G.S.C.,  
Chief of Staff.

OFFICIAL:

R. W. BRANN,  
Brig. Gen., G.S.C.,  
AC of S, G-3

UNCLASSIFIED

UNCLASSIFIED

COPY NO. 47

HEADQUARTERS FIFTH ARMY  
A. P. O. #464, U. S. Army

12 January 1944

ORDER OF BATTLE

BRITISH FORMATIONS UNDER COMMAND VI CORPS

SECTION I

CORPS AND ATTACHED ARMY TROOPS

HQ UNITS	Detachment 7/9 Army Air Support Control
ENGR	15 Stores Section,
MEDICAL	2 Mobile Casualty Clearing Station 25 Field Surgical Unit 2 Secs 485 Army Field Service ACC 12 Field Transfusion Unit
MISC	1 Reception Camp (capacity 800) 373 Prisoner of War Camp (capacity 2000) One Sec 26 Graves Registration Unit Det "J" Service

SECTION II

1 BRITISH INFANTRY DIVISION

	Hq 1 Infantry Division
	1 Infantry Division Defence and Employment Platoon.
ARTY	Hq 1 Infantry Division, Royal Artillery 2 Field Regiment 19 Field Regiment 67 Field Regiment 81 Anti Tank Regiment 90 Light Antiaircraft Regiment (311, 312, 313 Btys)
ENGR	Hq 1 Infantry Division, Royal Engineers 23 Field Company 238 Field Company 248 Field Company 6 Field Park Company
SIGS	1 Infantry Division Signals
RECCE	1 Reconnaissance Regiment
INFANTRY	2/7 Middlesex (Support Battalion)
SUPPLY AND TRANSPORT	Hq Commander 1 Infantry Division Royal Army Service Corps. 40 Divisional Troops Company 7 Infantry Brigade Company 42 Infantry Brigade Company 295 Guards Brigade Company 1 Bridging Plt.
MEDICAL	2 Field Ambulance 3 Field Ambulance 137 Field Ambulance 18 Field Hygiene Section

~~SECRET~~

~~U.S. SECRET - EQUALS BRITISH MOST SECRET~~

UNCLASSIFIED



ORDNANCE 1 Infantry Division Sub Park

REME Hq Commander 1 Infantry Division,  
Royal Electrical and Mechanical Engineers  
2 Infantry Brigade Workshop  
3 Infantry Brigade Workshop  
24 Guards Brigade Workshop

PROVOST 1 Infantry Division Provost Company

POSTAL 1 Infantry Division Postal Unit

INTELLIGENCE 1 Infantry Division Intelligence Section  
3 Field Security Section

2 Infantry Brigade  
1 Loyals  
2 North Staffordshires  
6 Gordons

3 Infantry Brigade  
1 Duke of Wellington Regiment  
2 Foresters  
1 Kings Shropshire Light Infantry

24 Guards Brigade  
5 Grenadier Guards  
1 Scots Guards  
1 Irish Guards

SECTION III

ADDITIONAL TROOPS FOR 1 DIVISION

ARMOUR 46 Royal Tanks

ARTY 24 Army Field Regiment  
80 Medium Regiment  
One Flight 655 Air OP Sqn

SUPPLY AND 1548 Arty Plt (80 Med Regt)  
TRANSPORT 15101 Arty Plt (24 A Fd Regt)  
239 GT Coy (DUKWS)

PAY 11 Field Cash Office

MISC Det, 2 Air Support Com Sqn (U.S.)

SECTION IV

3 BEACH GROUP

Hq 3 Beach Group

A.A. 224 Light Antiaircraft Battery

ENGR 102 Field Company  
6 Mechanical Equipment Section  
(Less Det)

SIGS 8 Beach Signal Section  
D-8 Detachment Line Section, 16 L of C Signals  
9 Beach Signal Section

SUPPLY AND 69 Detailed Issue Depot  
TRANSPORT 548 General Transport Company,  
Hq and Workshop Platoon  
Two Transport Platoons, 548 General  
Transport Company  
9225 Fire Fighting Section  
Sec, 348 Tipper Coy

UNCLASSIFIED

~~SECRET~~  
~~(THIS IS BRITISH MOST SECRET)~~

~~SECRET~~  
UNCLASSIFIED

Equals

MEDICAL

36 Field Surgical Unit  
3 Field Dressing Station  
10 Field Transfusion Unit  
Detachment --35 Beach Group Med. Sec.

ORDNANCE

8 Ordnance Beach Detachment

REME

545 Heavy Recovery Section  
Repair Detachment of 1 Inf Tps Wkshop

PROVOST

3rd Beach Group, Provost Unit  
4th Beach Group, Provost Unit

LABOUR

11 Pioneer Coy  
242 Pioneer Coy  
188 Pioneer Coy  
1991 (Swazi) Pioneer Coy (Smoke)

INFANTRY

Two Infantry Coys  
Coy 70 Royal West Kent  
Coy 54 Durham Light Inf

ROYAL NAVY

K and N Beach Parties

EFI

Det BIS  
Det BCD

TRANSPORTATION

1 Sec of 930 PC and R Coy

MISC

Det 12 Movement Control Group

UNCLASSIFIED

~~SECRET~~ UNCLASSIFIED

~~Equals~~  
~~U.S. SECRET EQUALS BRITISH MOST SECRET~~

UNCLASSIFIED

~~U. S. SECRET SHINGLE~~  
~~(EQUALS BRITISH MOST SECRET)~~

HEADQUARTERS FIFTH ARMY  
A. P. O. #464, U. S. Army

12 January 1944  
FOLLOW UP TROOP LIST, ANNEX NO. 2, PART III

OPERATION SHINGLE

1. Task Force H.

a. Commander: Major General Ernest W. Harmon.

b. Troops:

<u>Unit</u>	<u>Personnel</u>	<u>Vehicles</u>
1st Armored Div (-)	6,708	1,393*
Hq 1st Armd Div	(309)	(87)
Hq CC "A" (less Dets)	(38)	(15)
1st Armd Regt	(1,745)	(389)
Div Arty (less 68th FA Bn)	(1,016)	(178)
6th Armd Inf Regt (less 2d Bn)	(1,712)	(281)
191st Tank Bn	(696)	(120)
Co B, 81st Rcn Bn	(189)	(40)
16th Engr Bn (less Dets)	(432)	(121)
434th AAA Bn (less Det Hq & 2 Btrys)	(230)	(59)
Co A, 47th Med Bn (plus Hq Det)	(122)	(34)
Co A, Maintenance Bn	(168)	(48)
Det Hq Supply Bn	(5)	(2)
Qm Sec	(26)	(13)
Det Tn Hq	(11)	(3)
Det AG Sec (Includes Replacements & Chaplain)	(9)	(3)
<u>RCT 45th Inf Div</u>	<u>3,834</u>	<u>580</u>
179th Inf Regt	(3,000)	(340)
160th FA Bn	(531)	(175)
Co B, 120th Engr Bn	(162)	(31)
Co B, 120th Med Bn	(95)	(19)
45th Car Rcn Plat	(46)	(15)
Service Troops (To be nominated)		
Total	10,542	1,973

\* Includes 48 Motorcycles

UNCLASSIFIED

~~U. S. SECRET - EYES ONLY~~  
~~(EXCLUDED FROM MOST SECRET)~~

2. a. Commander: Major General Wm. W. Eagles  
b. Troops:

	<u>Personnel</u>	<u>Vehicles</u>
45th Inf Div (less 1 RCT)	11,679	2,080
3. Remainder 1st Armd Div	8,652	2,424*
4. Troops Tentatively Ear-marked.		
35th Field Artillery Group	92	22
141st FA Bn (155 How)	607	157
938th FA Bn (155 How)	607	157
976th FA Bn (155 Guns)	681	191
645th TD Bn	673	162
15th Obs Bn (less Co B)	336	71
TOTAL	2996	760

CARGO REQUIREMENTS

	<u>Ant</u>	<u>1st Armd Div (-)</u>	<u>RCT 45th Inf Div</u>
		<u>Trucks</u>	<u>Gross WT (TONS)</u>
Class I	30,000 Rations	20	175
Class III	100,000 Gallons	100	900
Class IV & V	636 Tons	134	1,206
Total		254	2,281
			36
			14
			277
			327

\* Includes Motorcycles

A. M. GRUENTHER  
Major General, G.S.C.,  
Chief of Staff

OFFICIAL:

*D. W. Brann*  
D. W. BRANN,  
Brig. General, G.S.C.,  
AC of S, G-3

UNCLASSIFIED

COPY NO. \_\_\_\_\_

~~UNCLASSIFIED~~  
~~SECRET~~

U. S. SECRET-SHINGLE  
(EQUALS BRITISH MOST SECRET)

HEADQUARTERS FIFTH ARMY  
A. P. O. #464, U. S. Army

12 January 1944

FOLLOW-UP

SERVICE TROOPS - OPERATION SHINGLE

1. Task Force H.

a. Service Troops	Pers	Vehs
56th Evac Hosp (700 Bed)	409	11
549th Amb Co (Sp)	93	16
1 Plat, 3838th QM Gas Supply Co	55	8
1 Plat, 85th QM Depot Co (less Det)	41	1
2d Plat, 47th QM (GR) Co	25	3
549th APU	<u>12</u>	<u>-</u>
TOTAL	635	39

2. Service troops for units listed in pars 2, 3 and 4 of Follow-Up Troop List, Annex No. 2, Part III.

Smoke Generator Co	135	93
11th Qml Maint Co	171	14
525th Ord HM Co (Tlc) (-Det)	139	64
29th Ord MM Co	169	78
Co A, 263rd QM Serv Co	215	2
3838th QM Gas Supply Co	107	8
93rd QM Rhd Co	179	2
3rd Plat, 48th QM (GR) Co	25	3
2 Truck Cos	<u>230</u>	<u>208</u>
TOTAL	1370	472

A. M. GRUENTHER  
Major General, GSC  
Chief of Staff

OFFICIAL:

D. W. BRANN, Lt.  
Brig. General, GSC  
AC of S, G-3

~~SECRET~~

~~Equals British MOST SECRET~~

~~U. S. SECRET-SHINGLE~~  
(EQUALS BRITISH MOST SECRET)

UNCLASSIFIED

UNCLASSIFIED

47

HEADQUARTERS FIFTH ARMY  
A. P. O. #464, U. S. Army

: By Auth of :  
: CG, FIFTH ARMY :  
: Initials KAT :  
: Date 5 Jan 1944 :

5 January 1944

ANNEX NO. III

TO: OUTLINE PLAN SHINGLE

REGRADED Unclassified BY AUTHORITY  
OF OSD Memo of May 3 1972  
BY Metcher ON 6/13/84

G-4 ANNEX TO OUTLINE PLAN SHINGLE

1. GENERAL.

a. Missions: To support Operation SHINGLE during the landing; the advance on COLLI LIZIALI; and until contact is made with the Main Fifth Army force.

b. Supply Procedure: There are four general phases of supplying the SHINGLE Force, as follows:

(1) Preparatory Phase - Coordination of all administrative planning and requirements, including the indication of special needs, by this Headquarters. Peninsular Base Section for U. S. troops, and FLAMBO for British troops, are responsible for laying down supplies at NAPLES and satellite ports of embarkation in accordance with requirements furnished by Fifth Army and Task Force Commander. Commanding General, Peninsular Base Section will inform FLAMBO as to time and place British supplies are to be delivered. Peninsular Base Section is responsible for loading convoys in accordance with detailed plans of Task Force Commander. Task Force Commander will designate and furnish necessary TQMs (British and American).

(2) Initial Assault Phase - Supply by units of Task Force over beaches. Task Force Commander responsible through assigned beach groups for receiving, stocking, and issuing supplies at beach and through organic service units for supplying combat elements. Task Force to be prepared to supply over beaches as long as required.

(3) Continuing Maintenance Phase.

(a) Until contact is gained with Main Fifth Army - Task Force Commander is responsible for receiving, stocking and issuing supplies over beaches and at inland dumps. Peninsular Base Section is responsible for continued loading and dispatching of convoys according to schedule or as called for by Task Force Commander. The Task Force Commander will make requests to Fifth Army for additional or special supplies or changes in scheduled supply plan for all units under his command.

(b) After contact with Main Fifth Army - Fifth Army is responsible for complete administrative responsibility for U. S. troops (10 Corps for British troops) after contact with Task Force. Supply over beaches will cease and supply through normal Army channels will be effected. Army will announce time of change in means of supply.

2. COMMUNICATIONS.

a. Water - Operation of all shipping and craft by Navy. Convoys to arrive in accordance with convoy schedule (Appendix #1), or as called for by Task Force Commander. All troops to be combat loaded, shore to shore.

b. Beaches and Ports.

(1) See G-2 Annex.

(2) It is expected that Port of ANZIO may be available for this operation; however the supply plan is not dependent on operation of this Port.

c. Roads - See G-2 Annex.

d. Rail - It is unlikely that rail will be utilized during Task Force phase.

UNCLASSIFIED

However, every effort should be made to prevent destruction and damage to any existing lines and rolling stock and to capture and protect equipment in working order. (See G-2 Annex)

e. Construction and Repair.

(1) Beach Roads - Beach roads and exits will require a large amount of work by shore and combat Engineers immediately on landing. Temporary roadways can be prepared in a few hours and should not delay early debarkation of vehicles.

(2) Port Reconstruction - Detachments of Port Reconstruction Engineers and Port of Embarkation Headquarters will land with the assault convoy, reconnoiter and plan for immediate rehabilitation of Port of ANZIO with a view to providing maximum facilities at earliest possible date. Engineer troops to rehabilitate this port will be supplied by Task Force Commander. Task Force Commander is responsible for the initial reconstruction of the Port of ANZIO.

**3. SUPPLY.**

a. General - References.

(1) Convoy schedule - Appendix No. 1.

(2) Supply Plan - Appendix No. 2.

b. D-Day Convoy (In addition to Basic Loads)

(1) Class I (Rations including gratuitous issue items)

(a) 10 days: type "5 in 1" for U. S. troops, "Compo" for British troops, and hospital rations on M/T Stores Ships for total force.

(b) A further reserve of "K" and "C" rations, based upon recommendations of Task Force Commander, will be carried in vehicles on LST's.

(c) Peninsular Base Section (for U. S. troops) and FLAMPO (for British troops) will supply rations to be consumed during voyage from the time troops are embarked.

(2) Water - 1/4 gallon per man per day for all purposes in 5 gallon containers for a period of 3 days (loaded on vehicles in LST's).

(3) Class II (Stores) (To be shipped on M/T Stores Ships)

(a) U. S. - Assault packs for individual equipment (Quartermaster, Ordnance, Medical and Chemical) at 5% of assault strength. Ordnance spare parts with units, and a minimum of Class II for Engineer and Signal maintenance.

(b) British - Minimum supply of spare parts and stores as required.

(4) Class III (P.O.L.) - Fuel and oil for 10 days based on 25 mile operational day for all vehicles of the task force (common items U. S. and British) plus loads on LST's as prescribed by Task Force Commander. (in trucks)

(5) Class IV (Engineer Stores) - Engineer construction materials for initial construction and maintenance of beach groups and development of landing facilities from U. S. and British stocks.

(6) Class V (Ammo.) - (For U. S. Forces and equivalent for British Forces)

(a) To be loaded on M/T Stores Ships.

4 Units of Fire for all weapons, except artillery and 81mm Mortar  
 5 Units of Fire for 75mm Tank Gun and 90mm AA Gun  
 7 Units of Fire for 75mm How.  
 7 Units of Fire for 105mm How. and 81mm Mortar  
 7 Units of Fire for 155mm How.  
 5 Units of Fire for 155mm Gun.  
 2 Units of Fire for Chemical (except 4.2" Mortar) No Toxic Gas  
 to be carried. 4.2" Mortar 7 Units of Fire.

Pyrotechnics grenades and mines as ordered by Task Force Commander.

(b) On LST's (in trucks)- as prescribed by Task Force Commander.

(7) Air - The following special Air Corps supplies will be carried on one Coaster:

	<u>Long Tons</u>
Pierced Steel Plank	1000
50,000 gallons 100 Octane Gasoline	175
5,000 gallons oil 1120 (Avn)	25
25,000 rounds .303 Ammunition	1.5
5,000 rounds 20mm Ammunition	2.5
	<u>1204.0</u>

c. First (D plus 4) and subsequent craft follow ups (3 days interval) of 14 LSTs.

(1) Proportionate tonnage of Class I, III and V (Rations, P.O.L., Ammo.) supplies to be loaded on the 500 trucks as prescribed by Task Force Commander.

(a) Class I (Rations including gratuitous issue items) - To consist of type "K" and "C" rations for entire force (U. S. and British).

(b) Allocation of lift for Class V (Ammo.) to be proportional to the U. S. and British forces on basis of weapon strength.

d. First Ship follow up (4 M/T Stores Ships and 1 Coaster) and subsequent follow ups to be loaded as indicated below:

(1) 10 days of all types of supplies for entire force modified as follows

(a) Class I (Rations including gratuitous issue items)- 10 days type "B" (including a percentage of "K" and "C" for troops in actual combat) for U. S. troops; 10 days bulk ration for British troops.

(b) Class V (Ammo.) - Same as in 3 b (6) above.

(c) Special items of equipment as prescribed by the Task Force Commander for U. S. and British troops.

(d) Air - The following special Air Corps supplies will be carried in one Coaster:

	<u>Long Tons</u>
Air Corps Supplies, 309th Ftr Sqdn	10
100,000 gallons 100 Octane Gasoline	350
10,000 gallons oil 1120 (Avn)	50
70 cylinders Oxygen (British)	4
50,000 rounds .303 Ammunition	3
10,000 rounds 20mm Ammunition	5
200 30 gallon Belly Tanks	4
Wire	20.5
	<u>446.5</u>

Air Corps items and amounts above may vary slightly in subsequent follow ups.

e. First follow up M/T Stores Ship and Coaster convoy to arrive at transport area on D plus 4. Second follow up to arrive NAPLES by D plus 6 and held until called for by the Task Force Commander.

f. Emergency Re-supply - By air to be made available to Task Force Commanders for small isolated groups (not to exceed 1 battalion in size) upon request to Commanding General, Fifth Army. This service is limited and cannot definitely be counted upon. Available equipment is limited to not more than 2 drops of small arms ammunition and water. Equipment for dropping rations is sufficient for a short period only.



4. INSTALLATIONS.

a. Existing and special embarkation facilities will be provided by Peninsular Base Section for all troops. Existing base depots for supplies and fixed bed hospitals (U. S. and British) for all casualties until contact is made with Main Fifth Army.

b. British beach bricks will operate as directed by Task Force Commander.

c. Continued Maintenance Phase (after contact with Main Fifth Army) Installations according to existing policies of Army. Locations to be announced.

5. EVACUATION.

a. Casualties - Estimated rates to include battle casualties, sick and injured for the entire force.

First seven days..... 15%

Second seven days..... 8%

Thereafter daily admission rates of 5 per thousand from all causes.

Evacuation of casualties will be by Hospital Ship to NAPLES Ports under arrangement of Peninsular Base Section and FLAMBO for U. S. and British troops respectively, until contact is made with the Main Fifth Army. The amount of evacuation by water will be dependent upon the weather. If the weather prevents evacuation by water, casualties will be retained in existing medical installations until contact with Main Fifth Army.

b. Burials -

(1) By Organizations initially.

(2) By Force Graves Registration Units as soon as possible.

(3) Cemeteries as designated by Task Force and Division Commanders.

6. MISCELLANEOUS.

a. Labor - Initially by troops. Development of local resources as soon as practicable.

b. The 6723rd Truck Group (Prov) has been set up primarily for the purpose of moving bulk supplies, Class I, III and V on LSTs from NAPLES to objective. This organization will not be held for land operation unless so released by Commanding General, Fifth Army.

c. Baggage - Surplus individual and organizational equipment. To be left with Rear Echelon of organizations and to be moved overland after contact is made with Main Fifth Army.

d. Mail - See G-1 Annex.

e. Replacements - See G-1 Annex.

f. Rear Echelon - Fifth Army - CASERTA.

CLARK  
Cmdg.

OFFICIAL:

*Tate*  
TATE,  
G-4

DISTRIBUTION:

Copies: 1 to 100 - Same as Outline Plan  
101 to 102 - G-4 AFHQ  
103 to 107 - GOC Adv Adm Ech AFHQ  
108 to 112 - CG, SOS, NATOUSA

113 to 122 - CG, P.B.S.  
123 to 132 - G-4, VI Corps.  
133 to 160 - Spares.

UNCLASSIFIED

~~SECRET~~ - SHINGLE

HEADQUARTERS FIFTH ARMY  
A.P.O. #464, U. S. Army

.....  
: ~~SECRET~~ :  
: By Auth Of :  
: CG, FIFTH ARMY :  
: Initials S. H. T. :  
: Date 7 January 1944 :  
: .....

47

7 January 1944

AMENDMENT NO. 1  
TO ANNEX NO. III  
TO OUTLINE PLAN SHINGLE

1. Subparagraph (3) below is added to paragraph 3 a of Annex No. III to Outline Plan SHINGLE, dated 5 January 1944.

2. "(3) Supply requirements for British troops will be demanded on the scale set forth in Memorandum, British Increment, Fifth Army, subject: 'Maintenance of British Troops', dated 31 December 1943."

CLARK  
Cmdg

OFFICIAL:

*Tate*  
TATE  
G-4

DISTRIBUTION:

1 to 100 - Same as Outline Plan  
101 to 102 - G-4, AFHQ  
103 to 107 - GOC, AFHQ Adv. Adm. Ech.  
108 to 112 - CG, SOS, NATOUSA  
113 to 122 - CG, PBS  
123 to 132 - G-4, VI Corps  
133 to 160 - Spares

2-8-15

- 1 -

~~SECRET~~ - SHINGLE

UNCLASSIFIED

UNCLASSIFIED

~~SECRET~~ - SHINGLE

HEADQUARTERS FIFTH ARMY  
A.P.O. #464, U. S. Army

.....  
: ~~SECRET~~ :  
: By Auth Of :  
: CG, FIFTH ARMY :  
: Initials RNT :  
: Date 14/1/44 :  
: .....

14 January 1944

AMENDMENT NO. 2

TO ANNEX NO. III

TO OUTLINE PLAN SHINGLE

REGRADED **UNCLASSIFIED**  
OF OSD memo of May 2, 1972 BY AUTHORITY  
BY Baker ON 6/13/84

1. General - No Change.
2. Communications - No change except:
  - a. Water Change "(Appendix #1)" to "(Appendix #1 as corrected)"
3. Supply (Complete substitution as follows)
  - a. General - References
    - (1) Convoy schedule - Appendix No. 1 as corrected
    - (2) Supply plan - Appendix No. 2 as corrected
  - b. D-Day Convoy (In addition to Basic Loads)
    - (1) Class I (Rations including gratuitous issue items)
      - (a) 10 days: type "5 in 1" and/or "10 in 1" for U.S. troops, "Compo" for British troops, and hospital rations on M/T Stores Ships for total force.
      - (b) A further reserve of "K" and "C" rations, based upon recommendations of Task Force Commander, will be carried in vehicles on LST's.
      - (c) Peninsular Base Section (for U.S. troops) and FLAMBO (for British troops) will supply rations and water to be consumed during voyage from the time troops are embarked.
    - (2) Water - As prescribed by the Task Force Commander.
    - (3) Class II (Stores). To be shipped on M/T Stores Ships.
      - (a) U.S. - Assault packs for individual equipment (Quartermaster, Ordnance, Medical, and Chemical) plus a minimum of bulk Class II as prescribed by the Task Force Commander.
      - (b) British - Minimum supply of spare parts and stores as required.
    - (4) Class III (P.O.L.) - Fuel and oil for 10 days based on 25 mile operational day for all vehicles of the task force (common items U.S. and British) plus loads on LST's (in trucks) as prescribed by Task Force Commander.
    - (5) Class IV (Engineer Stores) - Engineer construction materiel for initial construction and maintenance of beach groups and development of landing facilities from U. S. and British stocks.

- 1 -

~~SECRET~~ - SHINGLE

UNCLASSIFIED

~~SECRET~~ - SHINGLE

Forces) (6) Class V (Ammo) - (For U.S. Forces and equivalent for British

(a) To be loaded on M/T Stores Ships

- 4 Units of fire for all weapons, except artillery and 81mm Mortars
- 5 Units of fire for all 75mm Tank Guns and 90mm AA Guns
- 7 Units of fire for 75mm How.
- 7 Units of fire for 105mm How. and 81mm mortar
- 7 Units of fire for 155mm How.
- 5 Units of fire for 155mm Gun
- 2 Units of fire for Chemical (except 4.2" Mortar). No Toxic gas to be carried. 4.2" Mortar as prescribed by Task Force Commander within limits of stocks. Pyrotechnics, grenades and mines as ordered by Task Force Commander.

(b) On LST's (in trucks) as prescribed by Task Force Commander.

c. First Troop Follow Up (D Plus 4).

(1) Certain selected U.S. units (reinforcements) of the follow up, as designated by the Task Force Commander, will carry 5 days of supplies (including basic loads) to accompany troops on craft as follows:

(a) Class I (Rations including gratuitous issue items) - To consist of type "K", "C", "5 in 1" and/or "10 in 1" rations as prescribed by Task Force Commander.

(b) Class II (Stores) - Minimum essential as prescribed by Task Force Commander.

(c) Class III (P.O.L.) - Based on 25 mile operational day.

(d) Class IV (Engineer Stores) - As prescribed by Task Force Commander.

(e) Class V (Ammo)

- 2 Units of fire for all weapons except artillery and 81mm Mortar
- 2½ Units of fire for 75mm Tank Gun and 90mm AA Guns
- 3½ Units of fire for 75mm How.
- 3½ Units of fire for 105mm How. and 81mm Mortar
- 3½ Units of fire for 155mm How.
- 2½ Units of fire for 155mm Gun.
- 1 Unit of fire for Chemical (except 4.2" Mortar). No toxic Gas to be carried. 4.2" Mortar as prescribed by Task Force Commander.

d. First (D plus 4) and Subsequent Craft (Trucks) Follow Ups (3 days interval) of 14 LST's.

(1) Proportionate tonnage of Class I, III and V (Rations, P.O.L., Ammo) supplies to be loaded on special supply trucks as prescribed by Task Force Commander. See Appendix #2 as corrected.

(a) Class I (Rations including gratuitous issue items) - To consist of type "K" and "C" rations for entire force (U.S. and British)

~~SECRET~~ - SHINGLE

SHINGLE

(b) Allocation of lift for Class V (Ammo) to be proportionate to the U.S. and British forces on basis of weapon strength.

e. First and Second Ship Follow Ups (M/T Stores Ships), to be loaded as indicated below.

(1) 10 days of all types of supplies for entire force (less those units referred to in paragraph c above), modified as follows:

(a) Class I (Rations including gratuitous issue items) - 10 days type "5 in 1" and/or "C" (including a percentage of "K" for troops in actual combat) for U.S. troops; 10 days bulk ration for British troops.

(b) Class III (P.O.L.) - For entire force based on 25 mile operational day.

(c) Class V (Ammo.) - Same as in 3 b (6) above plus ammunition, on the same scale except for 75mm Tk Gun which will be  $7\frac{1}{2}$  U/F, for specially designated weapons of the units indicated in paragraph c above.

(d) Special items of equipment as prescribed by the Task Force Commander for U.S. and British Troops.

f. Third Ship Follow Up (M/T Stores Ships), to be loaded as follows:

(1) 10 days of all types of supplies for units designated in paragraph c above modified as follows:

(a) Class I (Rations including gratuitous issue items) - 10 days type "5 in 1" (including a percentage of "K" for troops in actual combat) for U. S. Troops.

(b) Class V (Ammo.) - Same as in 3 b (6) above.

g. LCT Re-supply. - 12 LCT's, upon return to Naples from assault area, to be loaded and dispatched to Transport area as soon as practicable.

h. Emergency Re-supply. - By air to be made available to Task Force Commander for small isolated groups (not to exceed 1 battalion in size) upon request to Commanding General, Fifth Army. This service is limited and cannot definitely be counted on. Available equipment is limited to not more than 2 drops of small arms ammunition and water. Equipment for dropping rations is sufficient for a short period only.

4. Installations. - No change.

5. Evacuation. - No change.

6. Miscellaneous. - Changed as follows:

b. Special Truck Supply - See paragraph 4, Appendix No. 2, as corrected.

g. Reports. - Administrative Reports by Task Force Commander will be submitted to Fifth Army by cable, utilizing alphabetic designations to indicate subjects, as of 1800 hours daily to reach this Headquarters not later than 1200 hours the following day, and will include information for British and U.S. troops separately as indicated below. First report to be submitted as of 1800 hours "D" Day. This report to be made as follows -- Action copy to Fifth Army, information copies to FLAMBO and P.B.S.

SHINGLE

~~SECRET~~ - SHINGLE

## (1) Form of Daily British Administrative Report.

British Adm. Report No. \_\_\_\_\_ as at 1800 hrs. \_\_\_\_\_ (Date)

A. Personnel disembarked and total feeding strength. \_\_\_\_\_ and \_\_\_\_\_

RATIONS.B. Compo issued and remaining in dumps. \_\_\_\_\_ and \_\_\_\_\_  
C. F.S. " " " " " " \_\_\_\_\_ and \_\_\_\_\_AMMUNITION.

D. 5.5 inch issued and remaining in dumps.	_____	and	_____
E. 4.5 " " " " " "	_____	and	_____
F. 25 pr H.E. " " " " " "	_____	and	_____
G. 105mm H.E. " " " " " "	_____	and	_____
H. 75mm A.P. " " " " " "	_____	and	_____
I. 75mm H.E. " " " " " "	_____	and	_____
J. 75mm Smoke " " " " " "	_____	and	_____
K. 40mm (Total all types) issued and remaining in dumps	_____	and	_____
L. 17 pr. " " " " " "	_____	and	_____
M. 6 pr (total all types) " " " " " "	_____	and	_____
N. Mortar 4.2" H.E. " " " " " "	_____	and	_____

VEHICLES.

O. Tanks and Half Tracks discharged (incl PRIESTS).	_____
P. Towed Guns.	_____
Q. Other vehicles (excluding trailers)	_____

GENERAL.

R. Details of any grave shortages of commodities or natures of ammunition.

S. Special items of administrative interest.

~~SECRET~~ - SHINGLE

UNCLASSIFIED

~~SECRET~~ - SHINGLE

(2) Form of Daily U.S. Administrative Report.

Report No. \_\_\_\_\_ for the period 1800 \_\_\_\_\_ to 1800 \_\_\_\_\_.

- A. Ports and Beaches in operation \_\_\_\_\_.
- B. Deadweight tonnage (Br & US) unloaded d/p and to date. \_\_\_\_\_ and \_\_\_\_\_.
- C. Personnel disembarked d/p and total ration strength. \_\_\_\_\_ and \_\_\_\_\_.
- D. Class I (Rations) issued during period and remaining in dumps. \_\_\_\_\_ and \_\_\_\_\_.
- E. Class III (Gallons) issued d/p (for US & Br) & remaining in dumps. \_\_\_\_\_ and \_\_\_\_\_.

AMMUNITION (rounds issued during period and remaining in dumps)

F. 81mm Mortar	_____	and	_____
G. 37mm Gun	_____	and	_____
H. 57mm Gun	_____	and	_____
I. 75mm How.	_____	and	_____
J. 75mm Gun	_____	and	_____
K. 105mm	_____	and	_____
L. 155mm (Gun)	_____	and	_____
M. 155mm (How)	_____	and	_____
N. 4.2 inch Mortar	_____	and	_____
O. 40mm (AA)	_____	and	_____
P. 90mm (AA)	_____	and	_____

VEHICLES (Number discharged during period)

- Q. Tanks and half trucks. \_\_\_\_\_.
- R. Towed guns. \_\_\_\_\_.
- S. Other vehicles (excluding trailers) \_\_\_\_\_.

GENERAL.

- T. Critical shortages. \_\_\_\_\_.
- U. Special items of administrative interest. \_\_\_\_\_.

CLARK  
Cmdg

OFFICIAL:

*Tate*  
TATE  
G-4

DISTRIBUTION:

- 1 to 125 - Same as Outline Plan
- 126 to 127 - G-4, AFHQ
- 128 to 132 - DAO, AFHQ Adv. Adm. Ech.
- 133 to 137 - CG, SOS NATOUSA
- 138 to 147 - CG, PBS
- 148 to 157 - G-4, VI Corps
- 158 to 185 - Spares

- 5 -

~~SECRET~~ - SHINGLE

UNCLASSIFIED

UNCLASSIFIED

~~SHINGLE~~

HEADQUARTERS FIFTH ARMY  
A.P.O. #464, U. S. Army

14 January 1944

APPENDIX #1 (CORRECTED) TO ANNEX NO. III TO OUTLINE PLAN SHINGLE.

OUTLINE CONVOY SCHEDULE

1. Assault Convoy, D-Day

a. Craft

84 LST (of which 18 allocated to carry 700 trucks and 100 Dukws loaded with approximately 3393 L/T Stores).  
84 LCI (L)  
57 LCT

b. Shipping

2 LSI (M)  
6 LSI (L)  
4 MT/ Stores Ships (Each carrying British and American stores; also carries Port Bn.)  
Lawton B. Evans  
Bret Harte  
John Banvard  
Hillary Henhert  
2 AGC (Biscayne, Bulola)

2. First Follow Up Convoy - To arrive in Transport Area D plus 3 to 5.

a. Craft

LST - Survivors of Assault LST - First 14 LST turned reserved for 500 trucks loaded with 2233 L/Tons of supplies.  
LCT - 30 LCT to remain in assault area to unload MT/ Stores Ships. Survivors up to 12 to be returned for loading bulk supplies to be sailed as soon as loaded.  
LCI (L) - Survivors of Assault Convoy.

b. Shipping

4 MT/ Stores Ships - To be sailed for arrival Transport Area on D plus 2 (Each carrying British and American maintenance).  
Fort Meductic  
Empire Austine  
Samuel Huntington  
Alexander Martin

3. Second Follow Up Convoy - To arrive Transport Area D plus 6 to D plus 10.

a. Craft

LST - Survivors of First Follow Up Convoy, first 14 of which reserved for 500 trucks carrying supplies.  
LCI (1) - Survivors as required.

- 1 -

~~SHINGLE~~

UNCLASSIFIED



UNCLASSIFIED

~~SECRET~~ - SHINGLE

b. Shipping

4 MT/ Stores Ships - To be on call at PANTALOON after D plus 6 for movement to assault area.

Reliance  
Fort Fairford  
Muhlenberg  
Tabitha Brown

4. Subsequent Follow Up.

- a. Craft - At approximately 3-day intervals.  
LST - Some survivors carrying supply trucks.  
LCI (L) - Survivors as required.

b. Shipping

MT/ Stores Ships - Number to be determined.

5. Hospital Carriers.

Four hospital carriers (St David, St Julian, St Andrew, Lunster) have been set up to support the operation. The following schedule has been tentatively established:

D-Day - St David and St Julian.  
D/1 - St Andrew and Lunster  
D/2 - St David and St Julian  
D/3 - St Andrew and Lunster  
D/4 and subsequently - The carriers to operate on the above turn-around basis as long as required.

CLARK  
Cmdg

OFFICIAL:

*Tate*  
TATE  
G-4

- 2 -

~~SECRET~~ - SHINGLE

UNCLASSIFIED

UNCLASSIFIED

~~SECRET~~ - SHINGLE

HEADQUARTERS FIFTH ARMY  
A.P.O. #464, U. S. Army

14 January 1944

APPENDIX #2 (CORRECTED) TO ANNEX NO. III TO OUTLINE PLAN SHINGLE.

1. No change.
2. a. Change 500 Cargo trucks, Provisional Truck Bn.  
to 1500 Cargo trucks, Provisional Truck Organizations.
- b. No change.
- c. Delete.
3. Initial Supply - No change.
4. Follow Ups.

a. The 14 LST's carrying 500 Cargo trucks on D Convoy will discharge their load and the trucks will proceed to dumps, unload immediately and assemble in area designated by Task Force Commander. The 14 LST's will return to Naples not later than night of D plus 1.

b. The first truck supply follow up (2d group of 500 trucks) will load on 14 LST's and sail to transport area as soon as possible after D plus 1. When discharged from the LST's, these trucks will proceed to dumps, unload and assemble in an area designated by the Task Force Commander. Each returning LST (25 in convoy) will be reloaded with a minimum of 5 empty trucks each from supply vehicles discharged.

c. The reloaded LST's will return to Naples for discharge of empty vehicles and will be reloaded with the second truck supply follow up (3d group of 500 trucks).

d. The first Follow Up Convoy of M/T Stores Ships will be loaded so as to arrive in transport area by D plus 2. Second and third follow ups (M/T Stores Ships) as called for by Task Force Commander.

5. Build Up - No change.

6. No change.

7. In order to meet emergency requirements, 12 LCT's (Br. Mk 4) from the assault convoy will return to Naples as soon as unloaded, where they will be loaded and moved to transport area as soon as practicable.

CLARK  
Cmdg

OFFICIAL:

*Tate*  
TATE  
G-4

~~SECRET~~ SHINGLE

UNCLASSIFIED

~~MOST SECRET~~~~SECRET - SHINGLE~~~~(Equals British MOST SECRET)~~

ANNEX NO. 4

SIGNAL PLAN TO OUTLINE PLAN OPERATION SHINGLE

8 January 1944

SIGNAL COMMUNICATION

MAPS See Operation Overlay to Outline Plan - Operation SHINGLE.

## 1. INFORMATION.

- a. Enemy - See Annex No. 1, G-2 Plan.
- b. Friendly Forces - See paragraph 1 b, Outline Plan - Operation SHINGLE.

## 2. MISSION.

- a. See paragraph 2, Outline Plan - Operation SHINGLE.
- b. To have VI Corps:
  - (1) Furnish radio communication to 3rd Div (U.S.), 1 Div (Br), Ranger Force, 504th Preht Inf Regt after radio silence is broken either afloat or ashore.
  - (2) Maintain radio communication to appropriate lateral units.
  - (3) Allocate seven (7) dukw mounted SCR-499 radio sets to furnish communication from VI Corps Headquarters to
    - (a) Fifth Army Headquarters.
    - (b) Subordinate Headquarters.
  - (4) Maintain wire communications to the beach groups.
- c. Axis of SIGNAL Communication VI Corps ANZIO - ALBANA LAZIALI - ROME.
- d. Attachment of Signal Units: To have -
  - (1) One radio repair section, 180th Signal Repair Company attached to one S & I Section of the 212th Signal Depot Company which in turn is to be attached to the 74th Signal Company (Special).
  - (2) Seven (7) detachments of the 163rd Signal Photo Company attached to VI Corps.
  - (3) The status of radio repair section now under control of VI Corps to remain unchanged.
  - (4) Detachment 817th Signal Port Service Company now under control of VI Corps attached to 74th Signal Company (Special) on Corps order.
  - (5) Detachment 51st Signal Battalion now available to VI Corps, attached to 1st Div (Br) on Corps order.
  - (6) Detachment 229th Signal Operation Company now available to VI Corps attached to 1st Div (Br) on Corps order.
- e. To have strict radio silence maintained until H Hour, D Day unless broken before set time on orders of VI Corps, Naval or Air Force Commander in the event of an emergency.
- f. To have:
  - (1) All radio equipment serviced and appropriately waterproofed before

~~U.S. SECRET - EYES ONLY~~

UNCLASSIFIED

~~MOST SECRET~~

the convoy leaves the port of embarkation.

(2) Special precautions taken to check and to be assured that all batteries in signal equipment are fresh and of the proper voltage.

(3) One set of spare batteries (waterproofed) taken with each radio set requiring batteries.

3. a. To have the 74th Signal Company (Special):

(1) Furnish radio communications throughout the U.S. beach establishment.

(2) Furnish the radio link for the beach establishment to VI Corps Headquarters.

(3) Furnish wire communications to all main beach establishments used by U.S. Troops.

(4) Commanding officer be responsible to VI Corps Signal Officer for operation of the beach Signal Dump (To make full use of signal troops at his disposal.)

b. To have:

(1) Detachment 212th Signal Depot Company (one officer - 25 EM)

(a) Operate the beach Signal Dump.

(b) Be responsible for taking ashore early on D Day one DUKW loaded with a balanced supply of replacement radio equipment, batteries, and other signal supplies to replace battle casualties.

(2) The officer in charge, prior to loading this DUKW, consult with the VI Corps Signal Officer for agreement as to types and quantities of supplies to be loaded.

c. To have Detachment 817th Signal Port Service Company (1 officer - 25 EM) assist the 212th Signal Depot Company (Det) in the operation of the beach signal dump.

d. To have the 180th Signal Repair Company provide:

(1) One radio repair section to inspect and maintain the signal equipment at the beach signal dump.

(2) One radio repair section assist the 57th Signal Battalion in the maintenance of signal equipment.

e. To have seven (7) teams from the 163rd Signal Photo Company provide photographic coverage for the operation. To have these teams attached to VI Corps for rations and administration but to operate under instructions issued by the Army Pictorial Service through the Commanding Officer, 163rd Signal Photo Company.

f. To have airplane messenger service established by Army Signal Officer as soon as practicable.

g. To have VI Corps notify the Signal Officer, Fifth Army as soon as contact is made with main units of Fifth Army advancing by land so that motor messenger service may be established.

h. To have VI Corps Signal Officer provided with a supply of pigeons prior to embarkation from the 6681st Signal Pigeon Company (Provisional). Additional pigeons to be made available to Corps Signal Officer as required.

i. To have a detachment of the 51st Signal Battalion operate two (2) radio

sets SCR-499, initially mounted in DUKWS provide radio communications at Headquarters 1st Div (Br) as directed by VI Corps Signal Officer.

j. To have a detachment of the 229th Signal Operation Company provide one (1) Sigaba and operate U.S. cryptographic service with the 1st Div (Br).

k. To have VI Corps Signal Officer, in preparing paragraph of Corps Field Order and Signal Annex (complete with radio net diagram and wire circuit diagram) coordinate with Signal Officer, Fifth Army; Naval Communications Officer to Commander 8th Amphibious Force; Signal Officer XII Air Support Command; and Communications Officer Fifth Army Air Support Control.

4. For plan of supply see Annex No. 5, Adm Plan to Outline Plan Operation SHINGLE.

5. To have Current SOI and SOP Fifth Army govern communications in this operation.

By command of Lieutenant General CLARK:

A. M. GRUENTHER,  
Major General, GSC,  
Chief of Staff.

OFFICIAL:

*R. B. Moran*  
R. B. MORAN,  
Brig, General, USA,  
Signal Officer

UNCLASSIFIED

HEADQUARTERS FIFTH ARMY  
A. P. O. #464, U. S. Army

.....  
: by authority of:  
: Intls: 7/14 :  
: Date: 5/1/44 :  
: .....

G-1

ANNEX NO. 5 TO OUTLINE PLAN SHINGLEI PERSONNEL PROCEDURE:

1. Personnel Composition of Fifth Army: See Troop List
2. Leaves and Furloughs: Suspended.
3. Promotion of Officers - (U. S. Forces):

a. Routine: As directed under provisions of Circular No. 231, Headquarters NATOUSA, dated 28 November 1943.

b. Battlefield Promotions and Appointments: As directed under provisions of letter, Headquarters Fifth Army, file AG 210.2 x 210.1-W, subject: "Battlefield Promotions and Appointments", dated 31 August 1943; letter, Headquarters Fifth Army, file AG 210.2 x 210.1-W, subject: "Battlefield Appointments", dated 28 September 1943; and letter, Headquarters Fifth Army, file AG 210.2 x 210.1-W, subject: "Battlefield Appointments", dated 21 December 1943.

4. Reclassification - (U. S. Forces):

a. Officers: As provided in Army Regulations 605-230, as amended, and pertinent NATOUSA Circulars.

b. Enlisted Men: As provided in Army Regulations 600-28.

5. Pay:

a. United States Forces: By Unit Finance Officer.

b. British Forces: By Field Cash Office.

6. Personnel Reports:

a. G-1 Daily Report: To be submitted daily as of 2359 hours, to reach Headquarters Fifth Army by 1500 hours the following day. The following Code Symbols will be used in the preparation of this report. All code designations will be included in each day's report. The word "none" will be used after a code designation when there is no figure to report:

FR - Wounded.  
DM - Captured, Missing and Interned.  
CN - Killed.  
TY - Axis Prisoners of War.  
GO - Non-Battle Casualties -- All categories.  
BW - Battle and Non-Battle Casualties Returned to Unit.  
EZ - Assigned Strength.  
HP - Effective Strength of Command.  
AO - Replacements Received.  
SX - Date for period ending 2359 hours.

b. Weekly G-1 Report - (U. S. Forces): To be submitted weekly as of 2359 hours on Saturday in accordance with Circular No. 191, Headquarters NATOUSA, dated 25 September 1943.

c. Battle Casualty Reports - (U. S. Forces): To be submitted as provided by Circular No. 187, Headquarters NATOUSA, dated 21 September 1943, as amended.

U.S. SECRET

UNCLASSIFIED

SHINGLE

REGRADED UNCLASSIFIED  
BY AUTHORITY  
OF  
OSD Memo of May 1, 1972  
BY  
DAK/eng ON 6/13/84

G-1

ANNEX NO. 5

d. Reports of Death - (U. S. Forces): To be submitted direct as directed by Circular No. 187, Headquarters NATOUSA, cs., dated 21 September 1943.

e. Change of Status Reports - (U. S. Forces): To be submitted to Headquarters Fifth Army.

f. Machine Records Unit: Organizations will continue to be serviced by the same units that have been servicing them prior to this operation.

g. Administration - (U. S. Forces): Corps, Division and Separate Unit Commanders will insure that Personnel Sections under their command will join the assault elements of the Force by D plus 7.

II MORALE:

1. Recreation and Welfare Activities:

a. United States Forces: Gratuitous issue of sales store supplies will be made with the ration.

b. American Red Cross: Representatives will accompany units to which they are presently attached.

2. Awards, Citations and Decorations - (U. S. Forces):

a. Awards, recommendations and presentations will be completed as rapidly as possible. No deserving action will go unrewarded. A thorough investigation of all recommendations will be made to assure that awards are merited.

b. Each headquarters will maintain a supply of medals which it is authorized to award.

c. Awards and decorations will be made as provided in Army Regulations 600-45; Circular No. 126, Headquarters NATOUSA, dated 2 July 1943, as amended, and Section III, Circular No. 216, Headquarters NATOUSA, dated 7 November 1943.

d. Recommendations for awards and decorations to be made by higher headquarters will be forwarded as promptly as possible.

e. Recommendations for Unit Citations for organizations distinguishing themselves by outstanding performance of duty in action against the enemy will be forwarded with minimum delay.

III REPLACEMENTS:

1. General:

a. United States: From Peninsular Base Section.

b. British: From No. 1 C.R.U.

2. Requisitions: Requisitions based on two weeks expected losses for American personnel, will be submitted to Fifth Army Headquarters by D minus 4. Where possible, specification serial numbers will be shown.

G-1

ANNEX NO. 53. Estimated Replacements Required:a. United States Forces: D to D plus 30 -- 6,981.

4. Forwarding Replacements: As they become available, replacements for American troops will be forwarded on request of Commanding General, VI Corps.

IV RELATIONS WITH CIVIL GOVERNMENT AND CIVILIANS: As military necessity may dictate prior to such time as Allied Military Government is able to assume control.

V SANITATION: See Appendix No. 1, attached.

VI PRISONERS OF WAR:

1. General: Commanding General, Shingle Force, is charged with the care, collection, security and processing of Prisoners of War.

a. Commanding General, Shingle Force, will establish a Force Prisoner of War Enclosure.

b. Evacuation: To Force Enclosure and to craft as directed by Commanding General, Shingle Force. Prisoners of War may be evacuated by returning LSTs. Prisoners of War will not be evacuated by any craft except LSTs. Not more than 150 Prisoners of War will be placed on any one LST. Navy will not accept unguarded Prisoners of War. Guards for Prisoners of War being evacuated by craft will be provided from Military Police units or other Ground Force troops under the command of Shingle Force. When the junction with Fifth Army is effected, the evacuation of Prisoners of War becomes an Army responsibility.

c. Number: Estimated Prisoners of War:

D to D plus 10	--	1,000
D plus 11 to D plus 30	--	500

d. Medical Attention:

(1) Captured medical personnel, supplies and equipment will be utilized to the fullest extent for treatment of sick and wounded prisoners; otherwise the Force Commander will designate other medical units and personnel for this service.

(2) Seriously wounded enemy prisoners of war will be admitted to the nearest medical unit under the same arrangements as are now in operation for the collection of our own wounded, and will be evacuated through normal channels.

e. Segregation: See G-2 Plan.

(1) It is particularly important that all Prisoners of War be searched for weapons and relieved of such (knives, scissors, guns, etc.) at the first opportunity.

(2) Prisoners of War will be permitted to retain mess equipment and blankets if same are in their possession at time of cap-



G-1

ANNEX NO. 5

ture. Prisoners of War will also be permitted to retain extra clothing and shelter halves if available. Personal effects and articles for personal identification will be retained by the prisoners. This includes identification tokens, insignia of rank, decorations and articles of value.

(3) A soldier's pay book (soldbuch) is to be considered as personal property and will not be removed from the prisoner except for examination.

VII MAIL: Delivery of mail will be suspended during the assault operation.

VIII GRAVES REGISTRATION AND BURIAL:

1. American: As directed by instructions contained in SOS, NATOUSA Pamphlet, "Army Burials and Graves Registration In Battle Areas", dated 29 May 1943, and Circular No. 29, Headquarters Fifth Army.

2. British: According to established procedure.

IX UNIFORM: The uniform as now authorized by organizations is prescribed.

X BRITISH FORCES: The following instructions are applicable to British Forces:

BATTLE CASUALTY TELEGRAPHIC REPORT:

1. In accordance with para 2(a)(iii) Sec 8 of "Unit Guide to Documentation", 1 (Br) Div will render Battle Casualty Telegraphic Reports, completed daily up to 0600 hours to G.H.Q. 2nd Echelon B.N.A.F. repeated to O2E 57 Area, C.M.F.

2. The second telegraphic report to Corps H.Q. will not be sent.

DAILY FIGHTING STRENGTH:

3. All British units under command VI Corps will render "Daily Fighting Strength State" on A.F. W.3006 to the next higher formation in accordance with G.R.O. 628/43. The normal battle casualty code will be used with the following additions:

C	...	Posted Strength.
T	...	Axis Prisoners of War.
G	...	Non battle casualties.
A	...	Reinforcements Received.

4. One copy of the "Daily Consolidated Fighting State" on A.F. W.3007 in respect of British Troops, will be rendered by VI Corps to British Increment Fifth Army.

WEEKLY FIELD RETURNS:

5. A.Fs. W.3008 and W.3009 will continue to be rendered weekly to G.H.Q., 2nd Echelon, B.N.A.F., with copies to No. 1 Advanced Reinforcements Section O2E., c/o 57 Area, C.M.F.

UNCLASSIFIED

G-1  
ANNEX NO. 5

6. ESTIMATED REQUIREMENT:

- (a) 1,500 Reinforcements will be phased in by VI Corps.
- (b) 3,000 Reinforcements will be held in Naples to be called forward by VI Corps as required.

7. ACCOMODATION:

Initially at Base in No. 1 Reception Camp. A detachment of No. 1 Reception Camp with first reinforcements will be phased in early. The remainder of the Reception Camp will be brought forward at a later date.

8. RE-INFORCEMENT PROCEDURE:

(a) The "Emergency Procedure" outlined in G.R.O. 564/43 will be adopted until instructions are given by H.Q., Fifth Army to revert to the Normal Procedure.

(b) Telegraphic demands will be made by Div H.Q. to O2E 57 Area repeated to H.Q. VI Corps and FLAMBO.

(c) A Reinforcement Officer from the Advance Reinforcement Section will be provided for Liaison duties between Corps, Div and Reception Camp.

9. DISCIPLINE:

(a) For disciplinary purposes the G.O.C. 1 Div will command all British Troops in VI Corps. It is anticipated that the G.O.C. 1 Div will be granted full disciplinary powers under Section 47 Army Act, together with a Warrant to convene General Courts Martial.

(b) In addition, application has been made to A.F.H.Q. for a Captain (Legal Staff) J.A.G's Branch, to be attached to Div H.Q.

(c) The next "Superior Military Authority" for disciplinary purposes will be the G.O.C. in C., 15 Army Group.

10. HONOURS AND AWARDS:

All recommendations for Honours and Awards will be submitted by G.O.C. 1 Div direct to H.Q., 15 Army Group.

By command of Lieutenant General CLARK:

OFFICIAL:

*Cheney L. Bertholf*  
CHENEY L. BERTHOLF,  
Colonel, GSC,  
A.C. of S., G-1.

A. M. GRUENTHER,  
Major General, GSC,  
Chief of Staff.

UNCLASSIFIED

## APPENDIX NO. 1.

UNCLASSIFIED

To  
Annex No. 5 to Outline Plan SHINGLE  
G-1

SANITATION:

1. General: The primary purpose of all sanitary measures is the prevention of disease. The following directives governing sanitation for the operation are published for the guidance of all concerned.

a. Unit commanders alone are responsible for sanitation within their command.

b. Unit surgeons are furnished to commanders as staff officers and their professional advice will be used in all matters pertaining to sanitation.

c. Medical Inspectors, members of the Surgeon's Staff in large units, are specially trained in all phases of preventive medicine and sanitation. Their services are available to lower units.

d. Field Manual 8-40 contains all the necessary information on this subject and its provisions will govern in all cases.

2. Water Supply:

a. An adequate supply of water from streams is reported in this area.

b. Sterilization: All water regardless of source, used for drinking purposes, will be either chlorinated by approved methods or boiled. There are no exceptions.

3. Food:

a. The usual precautions for prevention of contamination of food as employed in this theater will obtain during the operations.

b. Only such foods as prescribed by this or higher headquarters may be purchased from local sources.

4. Waste Disposal: Special attention will be necessary during the initial phases to invoke the proper methods of waste disposal, otherwise contamination of base areas will result. Unless the tactical situation definitely prohibits--the use of standard field sanitary methods, measures and appliances will be employed.

5. Billets: Billets for troops will not be occupied until approval from a medical standpoint is secured from a Medical Department Officer in each case.

6. Insect Control: Lice will be the principal insects encountered during the winter months. Measures for control of lice as specified in Field Manual 8-40, and Circular No. 42, Headquarters Fifth Army, dated 16 December 1943, will obtain.

7. Personal Hygiene: Advantage will be taken of every opportunity to promote a high standard of personal hygiene in the troops. Its demonstration in troops is an indication of command ability.

8. Diseases and their control:

a. General: The methods for control of individual diseases

UNCLASSIFIED

UNCLASSIFIED

SHINGLE

APPENDIX NO. 1  
to Annex No. 5 (G-1)(Sanitation)

outlined in Field Manual 8-40 will obtain. The vicinity of Rome and most of the coastline are reported as being especially unhealthy.

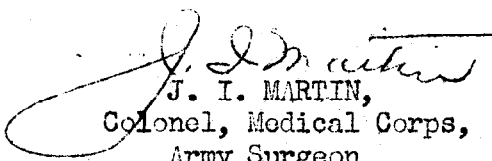
b. Special:

(1) Health precautions against upper respiratory conditions, trench foot and typhus fever will be followed as prescribed in Circular No. 38, Section I, Headquarters Fifth Army, dated 9 November 1943.

(2) Venereal Diseases: Special attention in all commands will be necessary to prevent the wide spread occurrence of venereal diseases.

(3) Gas Gangrene: Many gas gangrene infections have developed in wounds incurred in the Italian campaign. The instructions laid down in Medical Circular No. 4, Office of the Surgeon, Headquarters Fifth Army, dated 20 October 1943, will be strictly followed to prevent this disease.

(4) Immunization: Steps will be taken to insure that the immunization status of every individual is on a current basis.

  
J. I. MARTIN,  
Colonel, Medical Corps,  
Army Surgeon

UNCLASSIFIED

SHINGLE

12 January 1944

ANNEX NO. 6.

## CRAFT ALLOCATION AND WEIGHTS AND CRAFT LIMITATIONS

1. Craft Allocation - Assault Convoy.a. Total Craft Available

85 LST (15 - 6 davit)  
 60 LCT  
 90 LCI  
 6 LSI (L) (Br)  
 2 LSI (M)  
 2 AGC

~~SECRET~~  
 REGRADED **UNCLASSIFIED**  
 OF OSD memo of May 3, 1972  
 BY Metzler ON 6/13/84  
 BY AUTHORITY

(1) Ranger Force

	<u>CRAFT</u>	<u>PERS</u>
2 LSI (M) Royal Ulsterman - Beatrix	7 LCA	
1 LSI (L) (Br) Winchester Castle	6 LCA	
1 LST	12 LCA	1,200
2 LCT (2 Br)		

(2) 3rd Inf Div

	<u>CRAFT</u>	<u>PERS</u>
2 LSI (L) Circassia - Ascania (Br)	13 LCA	1,940
(1 Command for Div Hq)	13 LCA	2,000
37 LCT		
29 LST (10 - 6 davit)		
43 LCI (L) (3 fitted for command)		

(3) 1st Inf Div and Beach Gp (Br)

	<u>CRAFT</u>	<u>PERS</u>
30 LST (4 - 6 Davit) (1 - 2 Davit for Corps use)	20 LCA	1,870
3 LSI (L) (Br) Derbyshire - Sobieski-Glengyle	10 LCA	1,650
24 LCI (L)	11 LCA	730
1 AGC (Bulolo)		
18 LCT		

(4) Corps Troops

25 LST  
 17 LCI (L)  
 1 AGC (Biscayne)

(5) Navy

6 LCI (L)  
 3 LCT

(6) Army

12 Liberty Ships  
 3 Coasters (4 Coasters in Reserve)  
 1 Hospital Ship  
 3 Hospital Carriers

~~SECRET~~  
~~Equals British Most Secret~~  
 -1-

~~SECRET (EQUALLY BRITISH MOST SECRET)~~

UNCLASSIFIED

UNCLASSIFIED

~~SECRET~~ SHINGLE  
(EQUALS BRITISH MOST SECRET)

2. Estimate of Maximum lift of Craft and Minimum Personnel and Vehicles to be lifted.

a. Maximum Lift Available

<u>CRAFT</u>	<u>PERS</u>	<u>VEHS</u>
2 Headquarters Ships @ 150 Personnel and --- Vehicles	300	--
6 LSI(L) @ 1560 Personnel and --- Vehicles	9,360	--
2 LSI(M) @ 400 Personnel and --- Vehicles	800	--
LSTs		
91 (16 - 6 Davit) <u>Optimum</u> 80 (14 - 6 Davit) <u>Minimum</u>		
Operational based on 95% availability not considering battle losses from now on.		
86 (16 - 6 Davit) <u>Optimum</u> 76 (14 - 6 Davit) <u>Minimum</u>		
Planning based on 85 (14 - 6 Davit) (400 pers - 65 vehs)	34,000	5,445
90 LCI (L) @ 200 Personnel --- Vehicle	18,000	--
60 LCT @ 50 Personnel 10 Vehicles	3,000	600
Total Lift Available	65,460	6,045

b. Minimum Lift required

(1) Personnel	47,150	
(2) Vehicles		5,518
(3) Supplies in tons on craft	3,000	
Supplies in tons on Liberties	14,000	
of which 4,000 tons anticipated unloaded by D + 2.		

3. Weight Limitations of Landing Craft

LST (6 Davit)	350 Tons
LST Ordinary	400 Tons
LCI (L)	188 Tons
LCT (5)	150 Tons
LCT (4)	200 Tons
LCT (3)	200 Tons

4. LSI (L) Craft Capacities

	<u>PERS</u>	<u>CRAFT</u>
a. Derbyshire	1,870	20 LCA
b. Circassia	1,940	13 LCA
c. Oscoma	2,000	13 LCA
d. Winchester Castle	1,200	12 LCA
e. Sobieski	1,650	10 LCA
f. Glengyle	730	11 LCA

A. M. GRUENTHER  
Major General, G.S.C.  
Chief of Staff

OFFICIAL:

*D. W. Brann*  
D. W. BRANN  
Brig. Gen., G.S.C.,  
AC of S, G-3.

UNCLASSIFIED

~~SECRET~~ (EQUALS BRITISH MOST SECRET)

UNCLASSIFIED

HEADQUARTERS  
XII AIR SUPPORT COMMAND  
APO 374

E-TCD-ema

8 January 1944

COPY #

84

OPERATIONAL PLAN "SHINGLE"1. INFORMATION

a. Operation "SHINGLE" involves a joint air and amphibious assault against the mainland of ITALY on the towns of NEUTTINO and ANZIO for the purpose of aiding the capture of ROME.

b. The major objective of "SHINGLE" operation is to seize and secure a beachhead in the vicinity of ANZIO.

c. The second objective is to advance and secure the high ground of COLLI LAZIAL.

d. The initial "SHINGLE" landing force will consist of the American 3rd Division and the British 1st Division.

e. Airborne troops will be involved in the operation on the night of D-1/D only.

f. The position of the main troops of 5th Army is no factor on "SHINGLE" operations. 5th Army troops will be prepared for an advancement if enemy resistance is weakened by "SHINGLE".

g. "SHINGLE" force will consist of several convoys, with the first convoy leaving NAPLES area 0300 hours on D-1.

h. It is anticipated that there will be follow-up convoys re-supplying and reinforcing "SHINGLE" troops.

i. In conjunction with "SHINGLE" operations, there will be a feint or Commando raid in area not yet determined.

j. Five cruisers will be available to fire on pre-arranged targets and targets of opportunity in the "SHINGLE" area. The Navy will furnish a pre-designated code for specific area where possible targets are anticipated to develop.

2. MISSION OF THE AIR FORCE

a. Engage and destroy the enemy air strength in the air and on the ground. This is to be accomplished by engaging the enemy air force in air combat and by bombardment of his airfields and dispersal areas.

b. Disrupt enemy communications around ROME in order to prevent the movement of enemy reinforcements to the assault area and to break the enemy's will to resist.

c. Destroy enemy equipment, facilities and defensive installations.

d. Provide security against enemy air attack to assault convoy prior to and during the actual assault, and to neutralize enemy opposition to future movements.

e. Provide friendly troops in the assault area security against enemy air attack.

f. To furnish aerial special spotting for Army and Navy gunfire.

UNCLASSIFIED

- g. Provide nor. & close air action for assault.
- h. Provide smoke cover over enemy troops at Army request.
- i. Provide Intruder patrols contingent with and supporting paratroop operations if needed.

### 3. UNITS AVAILABLE

The following combat air units will operate under XII Air Support Command:

<u>UNIT</u>	<u>TYPE OF AIRCRAFT</u>
64th Fighter Wing	
31st Fighter Group	Spitfires (AM)
324 Wing	Spitfires (BR)
244 Wing	Spitfires (BR)
33rd Fighter Group	P-40 (AM)
324th Fighter Group	P-40 (AM)
79th Fighter Group	P-40 (AM)
600 Squadron	Beaufighter (BR)
415 Squadron	Beaufighter (AM)
86th Fighter-Bomber Group	A-36 (AM)
27th Fighter-Bomber Group	A-36 (AM)
47th Bomb Group (Light)	A-20 (AM)
111th Tac/R Squadron	P-51 (AM)
225th Tac/R Squadron	Spitfires (BR)

#### NOTES:

1. In addition to the above, all elements of Mediterranean Allied Air Force will be available should the need arise.
2. All day and night fighters will operate under the direction of 64th Fighter Wing.

### 4. FIGHTER DIRECTION

a. During the assault stage and until OPS facilities are established ashore, control of all land-based fighters in the assault area will be established aboard H.M.S. PALOMARES. All single-engine land-based fighters will be controlled as assigned in "SHINGLE" Air Plan, Communications, Annex "ABLE".

b. When established ashore, fighter OPS of the 64th Fighter Wing (Call sign "GRUBSTAKE") will control all fighter aircraft in the "SHINGLE" sector. All U.S. and British Air Force VHF channels will be operative.

### 5. MISSIONS OF SUBORDINATE UNITS

#### a. 64th Fighter Wing

1. To provide maximum day cover within the capabilities of units in accordance with the program set forth in the Operational Directive. This cover will continue daily until instructions to the contrary are received from the XII Air Support Command.
2. Be prepared to accept escort missions for day bombers in the assault area.
3. To establish fighter control facilities in the battle area as soon as the ground situation will permit.
4. To operate fighter direction from OPS center in the battle area when turned over by the Fighter Director ship.
5. To dispatch one group of fighters to a base in the battle area on receipt of instructions from Headquarters, XII Air Support Command.
6. To provide continuous patrol of fighter aircraft nightly from last light to first light in the battle area beginning last light D-2.



b. 27th Fighter-Bomber Group

1. Be prepared to accept fighter-bomber targets daily, using maximum effort, on receipt of instructions direct from Operations, XII Air Support Command.

c. 86th Fighter-Bomber Group

1. Be prepared to accept fighter-bomber targets daily, using maximum effort, on receipt of instructions direct from Operations, XII Air Support Command.

d. 47th Bomb Group (Light)

1. Be prepared to accept bomb targets daily on receipt of instructions direct from Operations, XII Air Support Command.

e. 111th Tac/R Squadron

1. Be prepared to furnish 8 missions for special spotting for Army and Navy gunfire on "D" day and D plus 1.
2. Also be prepared to furnish additional aircraft for special spotting for Army and Navy gunfire D plus 2 and D plus 3.
3. Be prepared also to accept Tac/R missions in 5th Army main front and assault beaches.

f. 225 Tac/R Squadron

1. Be prepared to accept Army Tac/R missions using maximum effort.

6. DISPOSITION OF COVER IN BATTLE AREA

- a. Fighters will normally be positioned in the battle area as follows:

<u>TYPE</u>	<u>ALTITUDE</u>	<u>NUMBER OF AIRCRAFT</u>
Spitfires	22-25,000	2
Spitfires	12-16,000	8
P-40	6-8,000	16

- b. Fighters will normally be positioned over convoy lane between the POMIZIANE islands and assault beaches as follows:

<u>TYPE</u>	<u>ALTITUDE</u>	<u>NUMBER OF AIRCRAFT</u>
Spitfires	22-25,000	2
Spitfires	12-16,000	4
P-40	6-8,000	8

7. EMPLOYMENT OF ACK-ACK

- a. It has been agreed that AA guns are free to fire on all aircraft not recognized as friendly below 3,000 feet within 12,000 yards of the beach. Above 3,000 feet within 12,000 yards of the beach, fire will be limited to aircraft recognized or identified by their appearance or action as hostile. After airdrome in assault area is constructed and in use by an Air Force Unit, AA guns will limit their fire to aircraft recognized or identified by their appearance or action as hostile at any height.

- b. The senior Army AA Commander on shore in this operation will be responsible for taking prompt action to cause all concerned to be notified when airdrome is in use. Determination of the effective date and time of change in AA fire rules will be the responsibility of Commanding General, VI Corps.

c. It has also been agreed that aircraft will not fly over friendly shipping at an altitude of less than 6,000 feet except when engaging hostile aircraft. Ship board AA will engage any aircraft at any altitude identified as hostile and also any aircraft under 3,000. AA will not engage aircraft above 3,000 feet unless positively identified as hostile or unless an hostile act is committed. After airdrome in assault area is in use, ship board Ack-Ack within 6,000 yards of beach will fire only on aircraft identified as hostile.

#### 8. DISPOSITION OF LONG RANGE TANKS

a. Should it become necessary for fighter aircraft on patrol to release long range tanks, every effort should be made to accomplish the release in such a manner as to avoid giving ground or sea-borne units the illusion of dropping bombs. In order to avoid undue alarm and the possibility of AA fire opening on friendly aircraft, it is extremely important that all Naval and Army personnel be fully warned of the possibility of aircraft dropping auxiliary tanks over their positions. This procedure will be avoided insofar as possible, but may be necessitated in the event the aircraft are jumped by enemy elements. In all cases, however, these tanks will be released from level flight and not from the diving attitude employed in bombing.


#### 9. AIR/SEA RESCUE

a. Air/Sea rescue is the responsibility of Coastal Command and will function in accordance with plan which is to follow.

#### 10. BOMBLINE

a. The Army Commander has agreed to furnish progressive provisional bomblines to cover friendly troops on the beaches. These lines will be forwarded when made available. It must be remembered that the bomblines as given are subject to revision during actual operation.

b. Latest bomblines information will be passed from Headquarters, XII Air Support Command at 1000 and 2000 hours daily, and at such other times as the situation dictates.

  
EDWIN J. HOUSE  
Major General, USA,  
Commanding.

#### DISTRIBUTION:

C.G., 64th Fighter Wing	1-15
AOC, NATAF	16-20
C.G., MAAF	21-25
C.G., 15th A.F.	26-28
AOC, NACAF	29-30
C.G., 62nd Fighter Wing	31-35
C.G., 5th Army	36-86
AOC, DAF	87-89
AOC, XII Bomber Command	90-91
Controller "PALOMARES"	92-96
O.C. NAVAL TASK FORCE (Thru NLO)	97-100
O.C. NAVAL CARRIER FORCE (Thru NLO)	101-104
C.G., 12th Air Force	105-108
C.G., XII Troop Carrier Command	109-110
Retain	111-230

UNCLASSIFIED

BIGOT - SHINGLE ~~SECRET~~

COMMUNICATION PLAN

Annex "A"

To "SHINGLE" Air Plan

PLAN "A"

( \* ) - This sign indicates information  
to be promulgated later.

~~SECRET~~

UNCLASSIFIED

HEADQUARTERS  
XII AIR SUPPORT COMMAND  
APO 374

UNCLASSIFIED

8 January 1944

AIR PLAN COMMUNICATIONS

INFORMATION

The operation "SHINGLE" is designed to make available to our troops the high ground south and south east of ROME. To achieve this a force under VI Corps Headquarters will make a landing from the sea in the vicinity of NETTUNO. Further information may be found in "SHINGLE" Air Plan.

FIGHTER CONTROL

Fighter control communication includes air ground communication, liaison between sectors, all Air Warning facilities, night fighter (GCI) control, operation of Radio Aid (D/F Fixer) and "Y" service. Fighter control for the area west of the 5th Army/Eighth Army boundary and north of 41° north latitude will be exercised by main operations 64th Fighter Wing call sign "Changer" located at Frattamagiore.

Control of aircraft in the landing areas will be initially from the Fighter Director ship H.M.S. PALOMARES, whose call sign is "STUPID". When suitable facilities have been established ashore, control will be handed over to this advanced operations call sign "GRUBSTAKE".

A GCI, together with sufficient personnel and equipment to form an advanced fighter operations sector will go ashore on the secondary waves of the assault to set up and be prepared to take over in case the Fighter Director ship is lost or is forced to leave prior to the arrival or setting up of the special equipment normally operated by Grubstake. This organization will use call sign "GRUBSTAKE" until D+5 contingent is prepared to take over.

Communications during the amphibious stage is shown in Appendix "A".

VHF AIRCRAFT CHANNELS

Day aircraft will hold channels as follows:

<u>CHANNELS</u>	<u>FUNDAMENTAL FREQUENCY</u>	<u>GROUP</u>
A1	<u>5710</u>	31st, 33rd Fighter Groups, 324 Fighter Wing (RAF)
A2	<u>( * )</u>	244 Fighter Wing, 79 Fighter Group
A3	<u>5840</u>	86, 27, 324 Fighter Bomber Groups
A4	<u>5970</u>	111 Tac/R Sqdn
A5	<u>5720</u>	225 Tac/R Sqdn
B	<u>6350</u>	All XII ASC aircraft (sector guard)
C	<u>6450</u>	All Aircraft (World Guard)
D	<u>6550</u>	All Aircraft (Air-Sea rescue)

UNCLASSIFIED

UNCLASSIFIED

Night Fighters will hold Channels as follows:

<u>CHANNEL</u>	<u>FUNDAMENTAL FREQUENCY</u>	<u>USE</u>
A	5950	
B	6520	
C	6450	World Guard
D	6550	Air/Sea rescue
E	5840	
F	6240	
G	5710	
H	( * )	

64th Fighter Wings main Operations, "CHANGER", will hold

A1	5710
A2	( * )
A3	5840
B	6350
C	6450
D	6550

H.M.S. PALOMARES (STUPID) WILL hold

A1	5710
A2	( * )
A3	5840
B	6350
C	6450

GCI (Implimented) will hold

A1	5710	
A2	( * )	
B	6350	
C	6450	
D	6550	Listening Only

Grubstake (Ops 2) will hold

A1	5710
----	------

~~SECRET~~

UNCLASSIFIED

B 6350

C 6450

D 6550

~~SECRET~~

UNCLASSIFIED

B	6350
C	6450
D	6550

In addition to the above controls a GCI mounted on an IST will furnish control of night fighters on the night of D-1 to D and as required thereafter. Its call sign will be ( \* ) and it will hold VHF channels as follows:

( * )	( * )
C	6450

The GCI scheduled to land on D+5 call sign ( \* ) will hold:

( * )	( * )
C	6450

#### Signal Units - D Day

2691 Signal AW Battalion will provide from their resources for the D-Day force 2 Light warnings, 1 GCI, four ground observer post (1 control) one "Y" detachment and sufficient personnel and equipment to form the Air Warning facilities of the fighter control ashore and to make up existing deficiencies in air warning personnel aboard the Fighter Director Ship.

82nd Fighter Control Squadron will provide personnel and equipment to install and operate fighter control equipment of the initial fighter control ashore and to install and man necessary additional equipment required on the Fighter Director Ship.

Personnel attached to fighter director ship will go ashore and join Operations room party when the Fighter director ship has completed its duties in the landing areas.

2nd AAF L.S. Communications Squadron will provide one half track, complete with BC-610 transmitter and associated equipment. In addition, they will provide a crew of six. The half track, driver and assistant driver will travel with, go ashore and remain with the D-Day contingent of the 2691st Sig. AW Bn., (Prov.) until the air liaison officer, XII ASC, comes ashore and calls for them. Three radio operators and one mechanic will go aboard the USS Biscayne and operate the channel provided for communications between the Biscayne and XII Air Support Command. When the air liaison officer goes ashore, the four men will travel with him and will operate the provided half track awaiting them with the 2691st Sig. AW Bn. (Prov.).

#### Signal Units D+5:

2691st Signal Air Warning Battalion will provide from their resources an additional GCI, two light warnings and sufficient personnel to man the air warning installations of the operations unit "GRUBSTAKE".

82nd Fighter Control Squadron will provide equipment and personnel to install and man the fighter control facilities of the unit "GRUBSTAKE".

439th Signal Construction Battalion will furnish one construction platoon to install lines to proposed airdrome and such other lines as the communications officer "GRUBSTAKE" may direct.

#### 27th Bomb Group

Prior to "D" day 27th Bomb Group will move to Corsica. Communications will be by radio and the 27th Bomb Group will provide one SCR 299 to furnish the Corsica terminal of the link. They will use 3450/6560 Kc as day/night frequencies; as shown in Appendix "B".

~~SECRET~~

UNCLASSIFIED

~~SECRET~~

Communications between Cruisers used for fire support will be by VHF direct to aircraft on channel A4 and A5 during the spotting. Communication from Cruiser to spotting aircraft Airdromes will be on H/F with the Airdrome equipment furnished from XII Air Support Command resources (SCR 299).

Air Support request communication will be furnished by 7th and 9th AASC and 2nd Communications Squadron under operational control of 5th Army.

Liaison with all bombers, other than fighter-Bombers of this command, will be on VHF channel "C" 6450 KC.

Anti Aircraft liaison. The anti aircraft forces will provide two liaison parties each consisting of 2 officers and two men. One party will go aboard the H.M.S. PALOMARES with the 64th Fighter Wing party making up the fighter control aboard this ship. They will go ashore when the sector control ashore takes over. The other party together with an ACR 188 complete, will join the 64th Fighter Wing party making up the initial shore control. Call signs and frequencies supplied by 5th Army.

Stand By Ship. The H.M.S. BULOLO will act as standby for the H.M.S. PALOMARES. It will be fitted with the same VHF channels as the PALOMARES. In addition two controllers from 64th Fighter Wing will sail aboard her and standby to take over if facilities aboard the PALOMARES should fail. The "BULOLO" is already established as Fighter Control ship and has all personnel (Plotters and radio operators) for this work.

Spot Tac/R. Naval sources will install and operate an SCR 522 aboard the U.S.S. BISCAYNE for the purpose of receiving information from aircraft of 111th and 225th Tac/R Sqdns. while in flight. This set will be fitted with channels A4, A5, "B" and "C", 5970, 5720, 6350, and 6450 x 18 Kc.

#### Air Warning Coverage

Initial air warning prior to establishing of units ashore in the assault area will be provided by broadcast from 64th Fighter Wing main operations room "CHANGER" on 3200 kc. Navy radar information will be obtained from naval reporting wave on 2610 kc. Alerts and other air warning information from ships not equipped with radar will be available on the naval help wave on 2150 kc. In addition, controllers at "CHANGER" and on the fighter director ship will give alerts to naval craft on the naval help wave.

Air warning units of the 2691st Sig. A.W; Bn. (Prov.) will go ashore on "D" Day and go into operation. W/T communications will be established as soon as possible with main operations "CHANGER". Initially the two light warnings, together with the four (1 control) ground observers, will come up on the Ops #2 (GRUBSTAKE) broadcast frequency, and listen out on the "CHANGER" common return frequency. (See Appendix "A") At such time as the operations ashore (implemented GCI) is operational, they will revert to their normal channels as shown in Appendix "B" and the operations ashore will commence a broadcast of tracks on the Ops #2 broadcast frequency.

Mediterranean Fighter Operations Grid (M.FOG) will be used for all raid reporting. Air Warning Code will be used in broadcast of plots and for Radar and ground observer post reporting.

#### Communications

Radio: Initially all communications will be by radio (HF and VHF). Combined operating procedure (R/T and W/T) will be used.

Wire: Commercial circuits in this area are to be under control of signal officer VI Corps and are available upon request from him. Outstanding initial requirements will be a circuit to the proposed airdrome. Other requirements are lines to the two GCI stations and the internal wiring of the various radio installations within the sector operations room.

When practical, rehabilitation of circuits to the south will be commenced to insure telephone communications to main operations (CHANGER) at an early date.

~~SECRET~~

~~SECRET~~Codes and Ciphers:

XII Air Support Command and 64th Fighter Wing will provide, in addition to their normal commitments, one Sigaba team, consisting of one officer and three enlisted men to function aboard the headquarters ship (USS BISCAZYNE) and to go ashore with the air liaison officer and join the VI Corps installations ashore. One Sigaba team, consisting of one officer and four enlisted men to function aboard the fighter director ship (HMS PALOMARES) and to go ashore and join the sector operations (GRUBSTAKE) at such time as the sector operations ashore is prepared to take over fighter control in the area. One Sigaba team, consisting of one officer and three enlisted men, at Capodichino airdrome to provide cryptographic system for the 111th Reconnaissance Sqdn. in connection with the direction of fire from naval cruisers and army artillery.

Following systems will be held:

XII ASC:	SIGRWHL-3	SIGATM
	SIGDIK-9	AFROG-1
	SIGSOT-10	AFHEP-1
	SIGRUIF-3	FLEET CODE
	(*) TYPEX (*)	

64th Ftr. Wg:	SIGRWHL-3	Friendly aircraft approach code
		(SDME 0535)
	AFHEP	Ops Room code (SDME 0515 LDF/2)
	AFROG-1	(CDME 0516/12)
	FLEET CODE	

HMS PALOMARES:	SIGRWHL-3	Friendly aircraft approach code (SDME
	AFHEP-1	Ops Room Code (SDME 0515 LDF/2) 0535)
	AFROG-1	(CDME 0516/12)
	FLEET CODE	

USS BISCAZYNE:	SIGRWHL-3
	AFHEP-1
	AFROG-1
	FLEET CODE

GRUBSTAKE:	SIGRWHL-3	Friendly aircraft approach code (SDME
(Ops #2)	AFHEP-1	Ops Room Code (SDME 0515 LDF/2) 0535)
	AFROG-1	(CDME 0516/12)
	FLEET CODE	

Team at CAPODICHINO:	SIGDIK-9
	SIGATM
	SIGSOT-10

305 LST/GCI:	Friendly aircraft approach code (SDME
	Ops Room Code (SDME 0515 LDF/2) 0535)
	(CDME 0516/12)

Air Ground Recognition. Several systems of identification, using colored smoke, Very pistol and panels respectively will be used according to specifications to be laid down in the "SHINGLE" XII Air Support Command S.O.I.

Radio Silence. Radio silence will be observed until H minus 30 minutes at which time the Rangers and Paratroops will attack. In dire circumstances radio silence may be broken (as during an Air Attack) but only to the extent required to cope with the situation.

~~SECRET~~



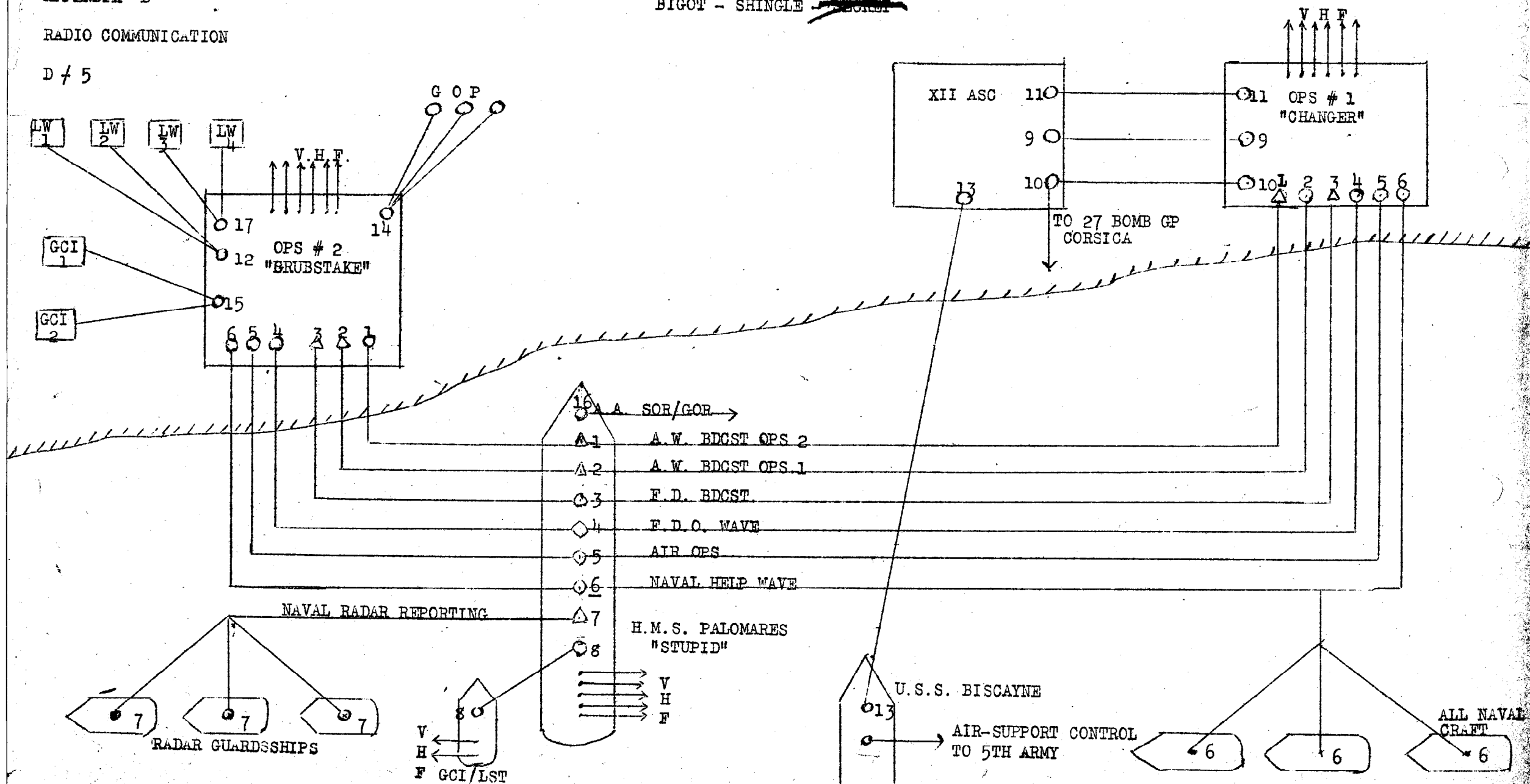
UNCLASSIFIED

APPENDIX "B"

RADIO COMMUNICATION

D / 5

BIGOT - SHINGLE ~~SECRET~~



UNCLASSIFIED

~~SECRET~~

## APPENDIX "C"

UNIT	"D" Day					D+5 Day				
	T	E	O	EM	VEH	TYPE	TONS	T	E	O
	A							A		
	M							M		
64th Ftr. Wing			7	11	13	3- $\frac{1}{4}$ T Jeep				
						1- $\frac{3}{4}$ T W/C			1	
						3-2 $\frac{1}{2}$ Ton			1	1- $\frac{3}{4}$ Ton
						3-1 T. Trlr				(carryall)
						3- $\frac{1}{4}$ T. Trlr	44			
										5
2691 Sig. A.W. Bn.		4	38	4		1- $\frac{3}{4}$ T W/C			2	3
Atchd (Radio Ops)			10			1- $\frac{1}{4}$ T Jeep				8
						2-Half tracks	30			
										12- $\frac{1}{2}$ Ton
										1- $\frac{3}{4}$ Ton
										(Amb)
										3-1 Ton Trlr
										(2 Pwr Trlr)
										19
82nd Ftr. Control Squadron		5	9	4		2-522 Jeeps			6	167
						1- $\frac{1}{4}$ Ton Jeep				24
						1- $\frac{1}{4}$ Ton Trlr.				Special
										187.4
SCR-602	2	2	42	6		4- $2\frac{1}{2}$ Ton		2	2	42
						2- $\frac{3}{4}$ Ton W/C	42			6
										4- $2\frac{1}{2}$ Ton
										2- $\frac{3}{4}$ T W/C
										42
GCI/COL	1	4	45	14		Special	100	1	4	45
										14
										Special
										100
90 W.U.	4	1	28	5		4- 3 T Trck				
						1- $\frac{3}{4}$ Ton	43			
439th Sig. Con. Bn.										
								1	45	10
										6- $2\frac{1}{2}$ Ton
										2- $\frac{1}{4}$ Ton Jeep
										2- $\frac{3}{4}$ T W/C
										64
2nd A.S. Comm. Sqdn.	1		5	2		1-Half track				
						1-Pwr Trlr	12			
TOTAL		23	190	48			269		16	202
									63	
										417.4

EXCESS EQUIPMENT (D+5)	QUANTITY	CU. FT.	WEIGHT
.080 copper	7000 lbs	200	7000 lbs
Quad cable	50 mi.	1550	30000 lbs
W-110	30 mi.	220	3000 lbs
109 gal. iron wire	10 mi.	50	1000 lbs
TOTAL		2020	41000 lbs (20 $\frac{1}{2}$ tons)

~~SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~SECRET~~

SPECIAL TYPE VEHICLES

GCI CONVOY - 14 VEHICLES

NO.	VEHICLES	WEIGHT	LENGTH	HEIGHT	WIDTH	TOTAL LBS.	TONS
1	Crosley transmitter	18000	20'7"	12'2"	7'7"	18,000	
1	Crosley receiver	18,000	20'7"	11'10"	7'6"	18,000	
1	Antennae trailer	11,000	22'0"	11'10"	7'7"	11,000	
2	Crosley power tender	14,500	21'3"	11'9"	7'5"	29,000	
1	Bedford VHF transmitter	14,500	23'11"	10'2"	7'5"	14,500	
1	Bedford VHF receiver	14,000	17'6"	11'2"	7'6"	14,000	
1	Water Trailer	5,500	16'7"	8'0"	7'6"	5,500	
4	Thornycroft load carrier	11,000	20'6"	9'0"	7'6"	88,000	
1	Bedford Lorry	5,500	14'8"	6'8"	7'8"	5,500	
1	Humber Snipe	3,000	14'0"	6'0"	7'0"	<u>3,000</u>	
						210,000	105.25

~~SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~SECRET~~

CHANNEL	FREQUENCY	POWER	NET	REMARKS
1	(3440 (*)	—	Fighter Director Ops 1 Ops 2	Plot Broadcast From Ops 2
2	(3200 (*)	75	Fighter Director Ops 1 Ops 2	Plot Broadcast From Ops 1
3	((*) (*)	—	Fighter Director Ops 1 Ops 2	Plot Broadcast From Fighter Director
4	((*) (*)	—	Fighter Director Ops 1 Ops 2	Controller Liaison
5	((*) (*)	—	Fighter Director Ops 1 Ops 2	Air Operations Link
6	2150	—	All Naval ships Ops 1 Ops 2	Naval help wave
7	2610	—	Radar Guard ships Fighter Director Ops 2	Plots from Radar Guard ships
8	((*) (*)	—	Fighter Director 1ST 305	Seaborne GCI plots and liaison
9	3095	75	XII ASC, 31st Gp 33rd Gp, 324 Wing	Ops Flash Link
10	3450 6560	400	XII ASC, Ops 1, 15th A.F., 42 Bomb Wing, 27 Bomb Gp.	Ops Link
11	2300 3860	—	XII ASC, Ops 1, Hq. D.A.F.	Ops Link
12	(*)	—	LW1 & LW2, Ops 2	Plotting
13	(*)	—	AS9/A&B, Biscayne, XII ASC	Air Liaison Link
14	(*)	—	GPO post, 1, 2, 3, AN Post 4	Observer Reporting
15	(*)	—	GCI 1 & 2 Ops 2	Plotting
16	(*)	—	Ops 1 Fighter Director GOR	Anti Aircraft Liaison
17	(*)	—	LW3 & LW4	Plotting

~~SECRET~~

UNCLASSIFIED

UNCLASSIFIED  
UNCLASSIFIED

~~SECRET~~

SPECIAL VEHICLES

VEHICLES AT GRUBSTAKE FOR D/5

DESCRIPTION	WEIGHT	LENGTH	HEIGHT	WIDTH	NUMBER OF VEHICLES	SHIP TONS
SCR 572	18000	38'7"	9'6"	8'7"	1	78.0
SCR 573	15040	22'2"	10'4"	8'0"	3	46.5
SCR 574	14835	22'2"	10'4"	8'0"	3	46.5
SCR 575	13775	21'2"	10'3"	8'0"	2	43.9
SCR 299	8650	18'6"	8'0"	7'6"	1	26.8
TRAILER, ONE TON WITH POWER UNIT	3450	11'6"	8'0"	7'2"	10	16.3
JEEP 4 x 4 $\frac{1}{4}$ TON	3125	124"	70"	62"	1	9.6
WEAPON CARRIER 3/4 T	5550	175"	82"	78"	1	17.4
COMMAND CAR 4x4 3/4 T	5375	165"	82"	78"	1	16.7
TRAILER, $\frac{1}{4}$ TON CARGO	550	109"	40"	56"	1	

*H. W. Serig*  
H. W. SERIG,  
Colonel, Signal Corps,  
Communications Officer.

~~SECRET~~

UNCLASSIFIED

BIGOT-SHINGLE

~~UNCLASSIFIED~~

HEADQUARTERS  
XII AIR SUPPORT COMMAND  
APO 374

T-AFAK-ena

8 January 1944

WEATHER SECTION

ANNEX "B" TO

OPERATIONAL PLAN "SHINGLE"

UNCLASSIFIED

~~SECRET~~

SECRET

HEADQUARTERS  
XII AIR SUPPORT COMMAND  
APO 374

T-AFAK-ema

8 January 1944

WEATHER ESTIMATE FOR "SHINGLE"

1. GENERAL

a. Climate of ROME area is generally influenced by tropical maritime air masses of the Mediterranean. The mountains which form the northern boundary of ITALY prevent direct invasions of polar air masses. Maritime polar air masses from the Atlantic occasionally penetrate across SPAIN and FRANCE into this region. (New Year's storm for example) The Appenine Mountains are a protection against invasions of continental polar air masses from RUSSIA and the BALKANS.

b. The climate of ROME is comparable to that of the lower slopes of the SIERRA NEVADA, 50 miles SE of SACRAMENTO, CALIF. Temperatures are about the same with an absolute maximum of 109 degrees compared to 104 degrees for ROME. Total annual precipitation is about the same, although the rainiest months in ROME are October and November, compared to January and February in the California locality.

2. SPECIFIC

a. Precipitation in this area is moderate with an annual mean rainfall of 32 inches. The highest amounts occur in October and November with approximately 4.7 inches per month. (NAPLES-CASERTA area in November received 9.15 inches and in December 6.83 inches --- almost double the normal rainfall.)

Average rainfall for January is 3.5 inches, but based on the rainfall during the past 3 months in the NAPLES area, we can expect about 5 inches instead of the normal of past history.

Twelve to fifteen rainy days may be expected during January. (We've already had 3 in the CASERTA area). Rainy spells seldom last longer than 2 to 3 days and the individual rainshowers that occur at intervals during those spells are usually less than 4 hours duration.

Snowfall is rare below elevations of 1000 feet, and snowcover is practically unknown. The APPENINES, however, are snowcapped 20-30 days and will probably remain snowcapped for the rest of January. They provide some excellent skiing.

b. Temperature: January is slightly colder than December --- average being 46 degrees Fahrenheit. Lowest temperature ever recorded was 21 degrees. Mountains temperatures are generally below freezing, especially where snowcapped. Plains areas seldom go below 32 degrees. The coldness, however, is a damp cold, as the humidity during early morning hours reaches a mean maximum of 30-85%.

c. Winds: Prevailing winds are from the North. (23% of the time). Northeast and West follow with 19% and 15% respectively. Average wind velocity is 10 m.p.h.

d. Clouds: Records show 6 days with over 8/10 sky cover; 16 days partly cloudy, varying from 2/10 to 8/10; and 9 days with clear skies. Visibilities are generally over 6 miles. It is usually poorer in early morning

UNCLASSIFIED

## BIGOT-SHINGLE

with occasional ground fog. Dense fog is uncommon, occurring in only 3 days during the January-April period.

e. Moonlight: The nights of Jan 24 to 26 incl. have practically no moonlight between sunset and sunrise and hence will be the most unfavorable for night strafing and bombing attacks. Moon phase is last quarters. See table below.

Date	Sunrise	Sunset	Moonrise	Moenset
20	0724	1704	0150	1242
21	0724	1705	0255	1319
22	0723	1706	0401	1405
23	0723	1707	0507	1459
24	0722	1708	0610	1600
25	0722	1710	0708	1709
26	0721	1712	0759	1823
27	0720	1713	0843	1938
28	0719	1714	0922	2052
29	0718	1715	0957	2205
30	0718	1716	1029	2314

### f. Soils:

1. The sum total of soil characteristics which affect trafficability of lands is too great, complex, and lacking in quantitative form to be given good cartographic expression. However, the soils of the ROME valley area are classified in the accompanying map according to the textural grade of the surface soil, organic matter content and other features which should show characteristic trafficability for each class, under conditions of seasonal or intermittent excessive moisture. The four classes of land which are recognized on the accompanying map are as follow:

a. Medium-Textured Land: These soils include loams and bouldery morainic types. They have a relatively even mixture of sand, silt and clay, which has a fairly smooth yet somewhat gritty, feel and is slightly plastic. If it is squeezed when dry, it will form a cast that will bear careful handling. Squeezing the moist soil will produce a cast that can be handled quite freely without breaking. The trafficability of these soils in relation to the soil moisture is between that of coarse - and fine-textured soils.

b. Fine-Textured Land: This class includes solid clayey morainic soil, clay and loam soil, clay soil with Limestone fragments, grassland soils medium in organic matter (chernozems) humus accumulations and gleying wet forest soils. Textural grades range from silt loam to clay. Silt loam contains a large amount of silt considerable free sand, and only a small amount of clay. When dry it may be cloddy, but when pulverized it feels silt and floury. It is greasy, rather than plastic, when wet. On the other hand, a clay contains 40% or more, of clay size material. It is very hard when dry, sticky and plastic when wet.

Fine textured soils are difficult to traverse either during wet seasons or immediately after heavy precipitation. They have a high water-holding capacity and do not drain as rapidly as sand, coarse - or medium-textured soils. Land in this class is characterized by a high content of clay or organic matter in the surface soil, either of which produce a slick surface that affords poor traction when wet.

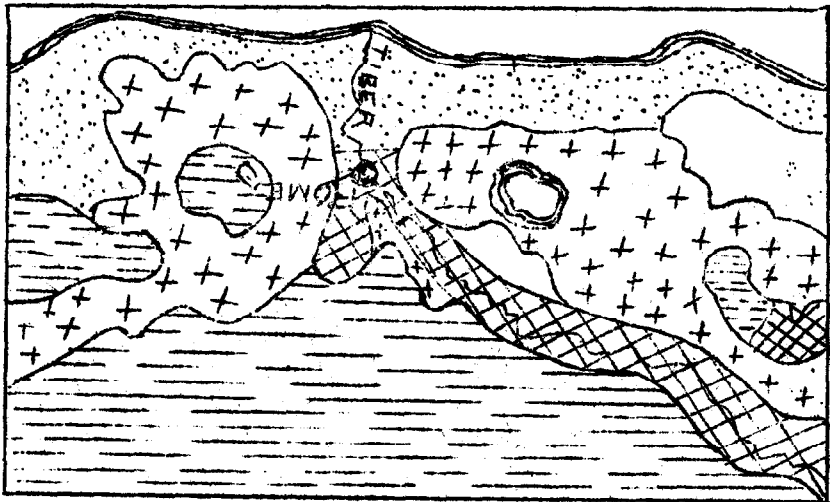
c. Alluvium, Swamp, Tundra and Marsh Lands: Peaty soils, alluvial, marsh, and meadow soils, salt marsh soils and tundra are included in this class. These lands usually occur on flood plains adjacent



to streams and rivers. They are often impassable without special equipment or improvements except when deeply frozen in the colder climates or during dry seasons and exceptionally dry weather in the warmer zones of medium rainfall. Alluvium along rivers in the semiarid and arid belts is passable except during high water or floods.

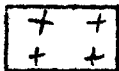
d. Mountain Land: Included in this class are all rocky or stony mountain soils, soils on recent eruptive rocks, rock-weathering debris, and bare rock. Factors of slope, irregular topography, and surface obstacles, such as stones or boulders, are more significant in determining the ease of vehicular movement over mountain lands than are soil factors.

A.F.A. KLUWEN,  
Lt. Col, Air Corps,  
Staff Weather Officer.



STATUTE MILES  
0 10 20 30 40 50

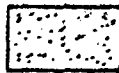
Medium-textured soils (loams) trafficable except during and immediately after precipitation.



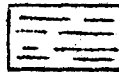
Fine-textured soils (clays) non-trafficable except during dry weather.



Marsh Land, Alluvium (texture undifferentiated) non-trafficable except over established roads.



Mountain Land (rocky) generally non-trafficable except over established roads.



UNCLASSIFIED

BIGOT - SHINGLE - ~~SECRET~~

COPY NO:

80

HEADQUARTERS  
XII AIR SUPPORT COMMAND  
AP O 374 US ARMY

SECRET *SBW*  
By Authority of:  
C.G., XII A.S.C.  
Date: 12 January 1944

OPERATION SHINGLE

INDEX O S.S.I. NO. 1  
XII AIR SUPPORT COMMAND

ITEM NO. 1	GENERAL INSTRUCTIONS
2	V.H.F. ALLOCATIONS
3	POINT TO POINT RADIO SCHEDULE Annex "A" Point to Point Radio Diagram
4	RADIO CALL SIGNS
5	CRYPTOGRAPHIC SYSTEMS
6	USE OF SCR 509
7	SUNRISE, SUNSET TABLES
8	RADIO AIDS TO NAVIGATION

~~SECRET~~

UNCLASSIFIED

UNCLASSIFIED

BIGOT - ~~SECRET~~ - SHINGLE

HEAD QUARTERS  
XII AIR SUPPORT COMMAND  
APO 374 US ARMY

SECRET

By Authority of: *VBH*  
C.G., XII A.S.C. *82*  
Date: 12 January 1944

S.S.I. NO. 1

ITEM NO. 1

Effective 0001A "D" Day

GENERAL INSTRUCTIONS

1. This Special Signal Instruction is to be used in conjunction with current XII Air Support Command S.O.I. and S.O.P.

2. Zone "A" time GCT (GMT) or "Z" time plus 1 hour was been prescribed as the official time for the operation SHINGLE.

3. Radio Silence. Radio silence will be observed until "H" hour. Since the Paratrooper and Ranger force will attack a short time previous to "H" hour their internal communications will commence prior to "H" hour. This will not be a signal for breaking radio silence. It will be observed until "H" hour except in dire circumstances (such as an attack) but then only as required to cope with the situation.

4. Verification will be in CDME 0504/3 both for W/T and R/T except on circuits between Air Corps and Army or Navy stations. In this case current 5th Army authenticator will be used.

5. Air Ground Recognition. Friendly troops will show yellow smoke to mark their location. Yellow flares from ground projectors or single yellow, or double yellow Very pistol flares will denote friendly troops in addition.

6. Spot Tac/R. Broadcast by reconnaissance aircraft of 111th and 225 Squadrons while over the battle area will be on VHF, Channel "C" 6450.

By Command of Major General HOUSE:

T. C. DARCY,  
Colonel, G.S.C.,  
Chief of Staff.

OFFICIAL:

*Stephen B. Mack*  
STEPHEN B. MACK,  
Lt. Col., A. C.,  
A/C of S., A-3,

~~SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~SECRET - BIGOT - SHINGLE~~COPY NO: 66HEADQUARTERS  
XII AIR SUPPORT COMMAND  
APO 374 U.S. Army

SECRET

By authority of:

C.G., XII A.S.C.

Date: 17 January 1944

Init: JRAmendments to  
S.S.I. No. 1  
Item No. 2

Effective 0001A "D" Day

1. This publication amends S.S.I. Number 1, Item No. 2, dated 12 January 1944.

2. a. Amend paragraph 2 as follows:

Night fighters (600 Squadron and 415th Squadron)

<u>BUTTON</u>	<u>FUNDAMENTAL FREQ.</u>	<u>ORGANIZATION HOLDING</u>
A	6350	AMES 887
B	6520	AMES 15051
C	6450	World Guard
D	6550	Air Sea Rescue
E	6420	(AMES 15076) (to be installed on instructions of controller)
F	6240	AMES 871, AMES 886
G	5710	AMES 8035
H	6040	AMES 8015

b. Amend paragraph 4 by adding: "D" 6550 Air Sea Rescue.

c. Amend paragraph 8 as follows:

AMES 871 aboard LST 430 Call sign (VIRTUE)

d. Amend paragraph 9 to include:

"D" 6550 Air Sea Rescue

e. Delete paragraph 15.

f. Amend paragraph 16 to read as follows:

Beaufighters of 255 Squadron will hold Coastal Air Force channels "C" 6450, "D" 6270, and "E" 6240, in common with XII ASC GCI stations. AMES 15076 will control these aircraft on their button "D" 6270, initially. AMES 15076 will also be equipped with 600 and 415th Squadrons button "E" 6420, and will be prepared to install it upon instruction from the fighter director ship controller.

g. Add the following paragraph:

17. AMES 871 will control initially on button "F" 6240, of 600 and 415th Squadrons, but will hold 255 Squadron's button "D" 6270, and will be prepared to install it on request from the controller.

By command of Major General HOUSE:

T. C. DARCY,  
Colonel, G.S.C.,  
Chief of Staff.

OFFICIAL:

UNCLASSIFIED

STEPHAN B. MACK,  
Lt., Col., A.C.,  
A/C of S, A-3~~SECRET~~ - BIGOT - SHINGLE

HEADQUARTERS  
XII AIR SUPPORT COMMAND  
APO 374 US ARMY

SECRET

By Authority of: *SBH*  
C.G., XII A.S.C. *22*  
Date: 12 January 1944

S.S.I. NO. 1

ITEM NO. 2

Effective 0001A "D" Day

V.H.F. ALLOCATIONS

1. Following V.H.F. channels will be employed in operation "SHINGLE":

BUTTON	FUNDAMENTAL FREQUENCY	ORGANIZATION HOLDING
A1	5710	31st, 33rd Fighter Groups, 244, 324 Wings.
A3	5840	86th, 27th Fighter Bomber, 324th, 79 Fighter Groups.
A4	5970	111th Tac/R Squadron
A5	5720	225 Tac/R Squadron (111th Tac/R Channel "B")
B	6350	All XII ASC aircraft (except 111th Tac/R Sqdn.)
C	6450	All aircraft (world guard)
D	6550	All aircraft (except 225 Tac/R Squadron)

NOTE: 111th Tac/R Sqdn. channels as follows: A - 5970 (A4)  
B - 5720 (A5)  
C - 6450  
D - 6550

2. Night fighters (600 Squadron and 415 Squadron)  
USE

A	5950	
B	6520	AMES 15051 and AMES 887
C	6450	World Guard
D	6550	Air Sea Rescue
E	5840	
F	6240	AMES 871, AMES 886
G	5710	AMES 8035
H	6040	AMES 8015,

3. Initial operations ashore (call sign GRUBSTAKE) will hold:

A1*	5710	Fighter Control
A3	5840	Fighter Bomber aircraft (normal channel)
B*	6350	Sector common (Initial fighter bomber control)
C	6450	World Guard

(\* High Power VHF transmitters)

~~SECRET~~

UNCLASSIFIED

4. "HMS ULSTER QUEEN" (call sign EARTHWORK):

BUTTON	FUNDAMENTAL FREQUENCY	USE
A1	5710	Fighter control
A3	5840	Fighter Bomber control
B	6350	Sector common (alternate fighter control)
C	6450	World guard

5. Ops #1 (Frattemaggiore Sector) ( call sign CHANGER)

A1	5710	Fighter control
A3	5840	Fighter Bomber control
B	6350	Sector common (alternate fighter control)
C	6450	World guard
D	6550	Air Sea rescue

6. Ops #2 (D/5 contingent) ( call sign GRUBSTAKE)

A1	5710	Fighter control
A3	5840	Fighter Bomber control
B	6350	Sector common (alternate fighter control)
C	6450	World guard
D	6550	Air Sea rescue and Emergency homing

7. AMES 15076 aboard LST 305 (call sign ADLUX)

C	6450	Fighter control inter comm
D	6270	For use with 255 Squadron

8. AMES 871 aboard LST 305 (call sign VIRTUE)

C	6450	Fighter control inter comm
F	6240	

9. HMS PALOMARES (Fighter director standby) (call sign STUPID)

A1	5710	Fighter control
A3	5840	Fighter bomber control
B	6350	Sector common
C	6450	World guard

10. Naval cruisers used in gunfire control will use:

A4	5970	111th Tac/R Squadron
A5	5720	111th Tac/R Squadron/ 225 Squadron
C	6450	World guard - All aircraft

~~SECRET~~

(2)

UNCLASSIFIED

~~SECRET~~

11. Corps artillery fire control will use:

BUTTON	FUNDAMENTAL FREQUENCY		USE
A4	5970	)	("A" 111th Tac/R Squadron)
		)	Fire Control
A5	5720		("A" 225 Sqdn, "B" 111th Tac/R Sqdn)

12. U.S.S. BISCAYNE (call sign SPEEDBALL)

C	6450	Convoy guard
---	------	--------------

13. "C" Channel (6450 x 18) will be used for the following in addition:

Airdrome control  
Homing  
Convoy cover

14. Channel A2 6420 will be supplied to the following: GRUBSTAKE (Ops #2), CHANGER (Ops #1) and these organizations will be prepared to install it on further instruction.

15. Channel F 6240 will be supplied to AMES 15076 and they will be prepared to install it on instruction, should the supply and use of Mark VIII night fighter "low boys" exceed the capabilities of AMES 871.

16. Beaufighters of 255 Squadron will hold channels "C" 6450, "D" 6270 and "F" 6240 in common with GCI stations. AMES 15076 will control these aircraft on their button "D" initially.

By Command of Major General HOUSE:

T. C. DARCY,  
Colonel, G.S.C.,  
Chief of Staff.

OFFICIAL:

*Stephen B. Mack*  
STEPHEN B. MACK,  
Lt. Col., A. C.,  
A/C of S., A-3.

~~SECRET~~  
(3)

UNCLASSIFIED

UNCLASSIFIED

~~SECRET~~ ~~SHINGLE~~

HEADQUARTERS  
XII AIR SUPPORT COMMAND  
APO 374 US ARMY

SECRET

By Authority of: SBA  
C.G., XII A.S.C. *SE*

Date: 12 January 1944

S.S.I. NO. 1

ITEM NO. 3

Point to Point Radio Schedule  
Effective 0001A "D" Day

CHANNEL	FREQUENCY	STATIONS	REMARKS
AS-35A/35B	2225 4780	HMS ULSTER QUEEN Ops 2, 64th Ftr. Wg. Ops 1, 64th Ftr. Wg.	Plot broadcast From Ops 2, 64th Ftr. Wg.
AS-36A/36B	2380 4250	HMS ULSTER QUEEN Ops 2, 64th Ftr. Wg. Ops 1, 64th Ftr. Wg.	Plot broadcast From Ops 1, 64th Ftr. Wg.
AS-37A/37B	1645 4000	HMS ULSTER QUEEN Ops 2, 64th Ftr. Wg. Ops 1, 64th Ftr. Wg.	Plot broadcast From HMS ULSTER QUEEN
AS-38A/38B	2545 5610	Ops 1, 64th Ftr. Wg. HMS ULSTER QUEEN Ops 2, 64th Ftr. Wg.	Controller liaison
AS-39A/39B	3220 4450	Ops 1, 64th Ftr. Wg. HMS ULSTER QUEEN Ops 2, 64th Ftr. Wg.	Air operations link
N-1	2150	Naval Guard Ships Ops 1, 64th Ftr. Wg. Ops 2, 64th Ftr. Wg.	Naval help wave
N-2	2610	Radar Guard Ships HMS ULSTER QUEEN	Plots from Radar Guard Ships
AS-40	3315	HMS ULSTER QUEEN LST 305 (AMES 15076) LST 430 (AMES 871)	Seaborne GCI plots and liaison
AS-4A/4B	3450 6560	XII ASC Ops 1, 64th Ftr. Wg. 15th Air Force 27th Ftr. Bomb Gp.	
AS-15	1565	Ops 2, 64th Ftr. Wg. ARIZONA (LW1) TEXAS (LW2)	Plotting
AS-9A/9B	2670 5220	XII ASC USS BISCAYNE Air Party VI Corps	Air liaison link
AS-9A/9B (Alternate)	3145 5040	XII ASC USS BISCAYNE Air Party VI Corps	Air liaison link
AS-41	3935	GOP #1, 2, 3, 4	Observer reporting
AS-42	3430	GCI 1 & 2 Ops 2, 64th Ftr. Wg.	Plotting

UNCLASSIFIED

~~SECRET~~



UNCLASSIFIED

CHANNEL	FREQUENCY	STATIONS	REMARKS
A-1	1970	GOM Ops 2, 64th Ftr. Wg. HMS ULSTER QUEEN	Antiaircraft liaison
AS-16	1720	Ops 2, 64th Ftr. Wg. MAINE (LW3) VERMONT (LW4)	Plotting
N-3	2810	111th TacR Sqdn. Naval Cruisers VI Corps artillery	Artillery to airdrome link
N-4	3500		Attack force voice
Special SCR 509	14	HMS ULSTER QUEEN 56(Alternate)USS BISCAYNE Ops 2, 64th Ftr. Wg.	Special liaison channel (Assault only)

By Command of Major General HOUSE:

T. D. DARCY,  
Colonel, G.S.C.,  
Chief of Staff.

OFFICIAL:

*Stephen B. Mack*  
STEPHEN B. MACK,  
Lt. Col., A. C.,  
L/C of S., 4-3.

~~SECRET~~

-2-

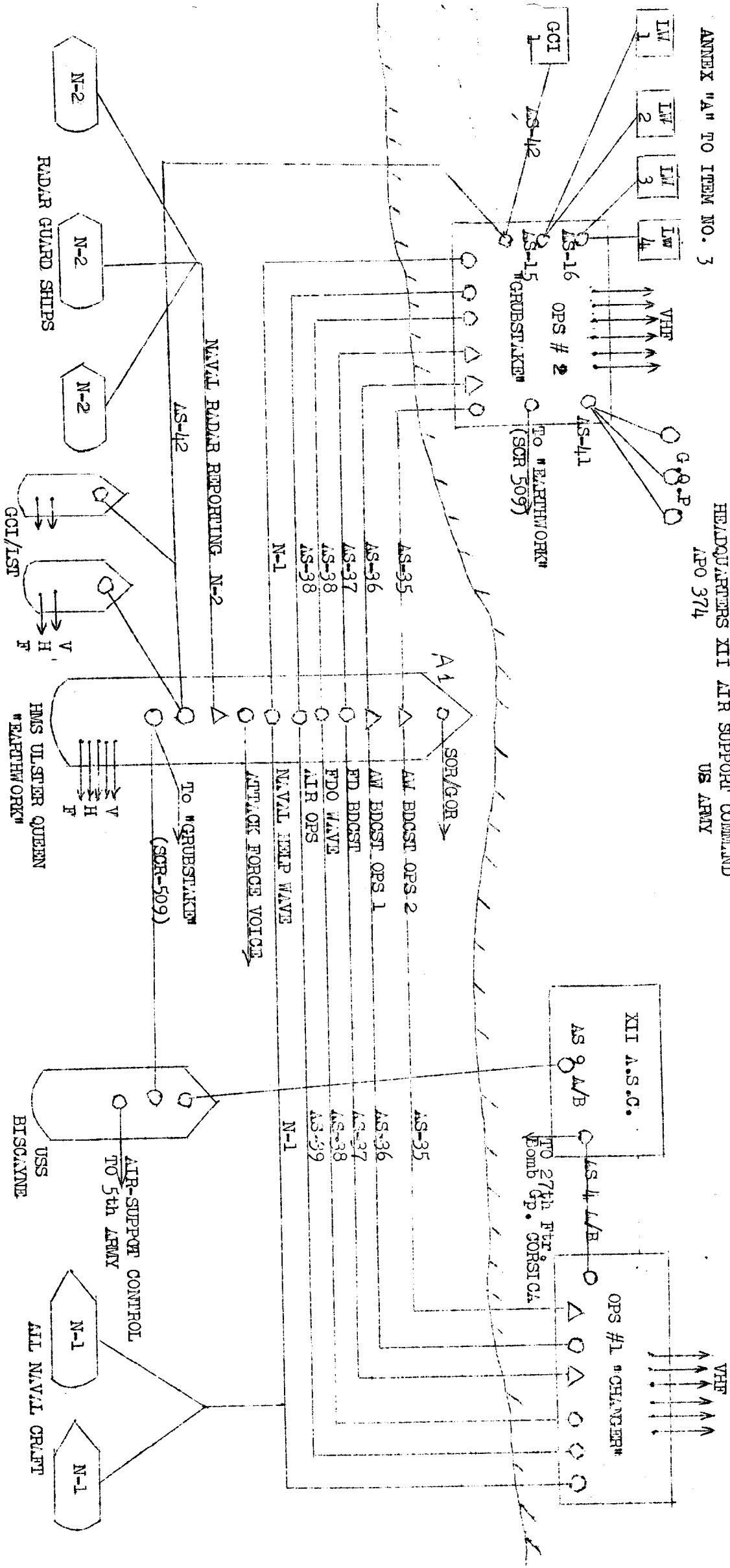
UNCLASSIFIED

UNCLASSIFIED

S. S. I. NO. 1

ANNEX "A" TO ITEM NO. 3

HEADQUARTERS XII AIR SUPPORT COMMAND  
APO 374 US ARMY



UNCLASSIFIED

~~SECRET~~

UNCLASSIFIED

~~SECRET~~ BIGOT - SHINGLE

HEADQUARTERS  
XII AIR SUPPORT COMMAND  
APO 374 US ARMY

SECRET

By Authority of: *SPH*  
C.G., XII A.S.C. *88*  
Date: 16 January 1944

S.S.I. NO. 1

ITEM NO. 4

RADIO CALL SIGNS

Part I	Principal Headquarters
II	Headquarters Ships
III	Tactical Units
IV	Ground Units, XII A.S.C.
V	VI Corps Units
VI	Wireless Observer Units
VII	Raid Reporting System
VIII	Filtered Air Warning Broadcast
IX	Airfields
X	VHF D/T Fixers

~~SECRET~~

UNCLASSIFIED

~~SECRET~~RADIO CALL SIGNS

## PART I

## Principal Headquarters

XII ASC Adv.	11U	SEANSHEE
XII ASC Rear	03G	FRESCO
64th Fighter Wing	98H	GLOTTIS

## PART II

## Headquarters Ships

HMS PALOMARES	G2F	STUPID
HMS ULSTER QUEEN	09U	EARTHWORK
HMS BULOLO	11B	LEFTWOOD
USS BISCAYNE	J1B	SPEEDBALL

## PART III

## Tactical Units

31st Fighter Group	18K	BUOYANT	
307th Ftr. Sqdn.	18K1	GUNNA	
308th Ftr. Sqdn.	18K2	HELPFUL	
309th Ftr. Sqdn.	18K3	HOBNAIL	
33rd Fighter Group	95J	ENDWAYS	
58th Ftr. Sqdn.	95J1	GOLBULE	
59th Ftr. Sqdn.	95J2	STATESMAN	
60th Ftr. Sqdn.	95J3	TONSIL	
27th Fighter Bomber Group	41M	ACBUD	(See Note 1)
522nd Ftr. Bomb Sqdn.	41M1	DEEWT	
523rd Ftr. Bomb Sqdn.	41M2	NEBRASK	
524th Ftr. Bomb Sqdn.	41M3	TICKER	
86th Fighter Bomber Group	66N	HATSTAND	
525th Ftr. Bomb Sqdn.	66N1	CANYON	
526th Ftr. Bomb Sqdn.	66N2	GOGLET	
527th Ftr. Bomb Sqdn.	66N3	METHINKS	
324 Wing	40Z	DUMBO	
43 Sqdn.		RATTER	
72 Sqdn.		STEAMER	
93 Sqdn.		PACKARD	
111 Sqdn.		BANKER	
243 Sqdn.		DIGIT	
111th Reconnaissance Sqdn.	06U	TOPIC	
Tac/R		PROTEST	
Gun spotting		DENDRON	
225 Squadron		AUNTIE	
Gun spotting		FIZZLING	
600 Sqdn. (Nightfighter)		CHINA	
415 Sqdn. (Nightfighter)	53W	LANKIN	
23 Sqdn. (Intruder)		JUICY	
255 Sqdn. (Nightfighter)		GRUDNUNK	

~~SECRET~~

UNCLASSIFIED

UNCLASSIFIED

## PART III (Contd)

## Tactical Units.

79th Fighter Group	46W	ENDURE	
85th Ftr. Sqdn.		VISOR	
86th Ftr. Sqdn.		ELBOW	
87th Ftr. Sqdn.		BOTTLE	
99th Ftr. Sqdn. (Atchd)		CRAFTY	
244 Fighter Wing	91Z	HOTEL	
92 Sqdn.		ONION	
145 Sqdn.		FOOLISH	
41 Sqdn.		BRANDY	
601 Sqdn.		GRAVY	
47th Bomb Group		VHF	H/T
84th Bomb Sqdn.		CEZENDALE	BURMA
85th Bomb Sqdn.		"	"
86th Bomb Sqdn.		"	"
87th Bomb Sqdn.		"	"
324 Fighter Group			
314 Ftr. Sqdn.		DUNNING	
315 Ftr. Sqdn.		PATHOS	
316 Ftr. Sqdn.		SUPINE	
3rd P.R.U.			
5th Squadron		BRASSNECK	
12th Squadron		CHALLENGE	
33rd Squadron		DRESSDOWN	
323 Fighter Wing			
32 Squadron		ROSIE	
73 Squadron		PRIMUS	
253 Squadron		RINGUP	

## PART IV

## Ground Units - XII A.S.C.

Hq. 64th Ftr. Wing	98H	GLOTTIS
64th Ftr. Wg. Ops 1	01T	CHARGER
64th Ftr. Wg. Ops 2	48T	GRUBSTAKE
2691st Sig AW Bn	15R	PUGDOG
82nd Ftr. Cont. Sqdn.	06S	DEMON

## PART V

## VI Corps

VI Corps Artillery Fire Control	69U	GEDNA
VI Corps Air Liaison Party	01U	PASSENGER

## PART VI

## Wireless Observer Units

90th W.O.U.	90U	BOARDROUND
Control # 1	90UC1	
Post # 1	90U1	
Post # 2	90U2	
Post # 3	90U3	
Post # 4	90U4	

UNCLASSIFIED

~~SECRET~~

~~SECRET~~

## PART VII

## Raid Reporting System

AMES 887	84K	PROJECT
AMES 871	86W	VIRTUE
AMES 15076	69S	ADLUK
LW1 (ARIZONA)	86S	DRAMA
LW2 (TEXAS)	74V	LOFTMAN
LW3 (MAINE)		
LW4 (VERMONT)		

## PART VIII

## Filtered Air Warning Broadcast

64th Ftr. Wg. Ops #1	01T
64th Ftr. Wg. Ops #2	48T

## PART IX

	Airfields	R/T	H/F
CAPODICHINO	W/T	VHF	CAESAR
POMIGLIANO		CAESAR	GREMLIN
CASTLE VOLTURINO		RUNNER	BUOYANT
CERCOLA		BUOYANT	TEXAS
LAGO		TEXAS	
MARCIANISE		DUMBO	
VESUVIOUS		BEAVER	BEAVER
POMPEII		BURMA	GLENDAL
GAUDO		HALTER	
		NOTHING	

## PART X

## VHF D/F Fixers

(See Radio Aids to Navigation)

DOUGLAS  
CLUMSY  
CONVENT  
SHOLTO

JJUC - Emergency code sign for naval units desiring communication with Army units.

NOTE 1: 27th Fighter Bomber Group will use callsigns as assigned at present until they commence operation in CORSICA. At that time they will use the following:

522nd Ftr. Bomb Sqdn.	VHF	PRECIOUS
523rd Ftr. Bomb Sqdn.		CHAFMER
524th Ftr. Bomb Sqdn.		KINDLE

The ground W/T station will use 05V in CORSICA.

By Command of Major General HOUSE:

T. C. DARCY,  
Colonel, G.S.C.,  
Chief of Staff.

OFFICIAL:

*Stephen B. Mack*  
STEPHEN B. MACK,  
Lt. Col., A. C.,  
A/C of S., A-3.

~~SECRET~~

UNCLASSIFIED

~~SECRET~~

HEADQUARTERS  
XII AIR SUPPORT COMMAND  
APO 374 US ARMY

SECRET

By Authority of: *YH*  
C.G., XII A.S.C.  
Date: 16 January 1944

S.S.I. NO. 1

ITEM NO. 5

CRYPTOGRAPHIC SYSTEM  
Effective 0001A "D" Day

SIGABA (Joint Army-Navy). The SIGABA will be used in conjunction with SIGDIK in accordance with existing instructions. There will be a SIGABA aboard the headquarters ship (USS BISCAYNE) which will go ashore with the air liaison officer and join the VI Corps installations ashore. The SIGABA aboard the fighter director ship (HMS ULSTER QUEEN) will go ashore and join sector operations (GRUBSTAKE) as soon as sector operations is prepared to take over fighter control in the area. There will be a Sigaba team at Capodichino to provide cryptographic system for the 11th Reconnaissance Squadron.

SIGATM (Joint Army and Navy strip) is to be used as a reserve system for SIGABA in accordance with existing instructions. It will be held by those parties holding SIGABA.

SIGSOT (Joint Army-Navy M-209) This system will be held by all parties and is to be used for confidential traffic only.

FLEET CODE: This code is to be used in accordance with existing instructions.

OPS ROOM CODE: The basic document SDME 0515/LBF/2 is to be used in conjunction with the current encode and decode version of CDME 0516/12.

FRIENDLY AIRCRAFT APPROACH CODE: CDME 0535 is to be used in accordance with existing instructions.

SD 0504: This W/T authentication code is to be used on Point to Point channels in accordance with existing instructions.

By Command of Major General HOUSE:

T. C. DARCY,  
Colonel, G.S.C.,  
Chief of Staff.

OFFICIAL:

*Stephen B. Mack*  
STEPHEN B. MACK,  
Lt. Col., A. C.,  
A/C of S., A-3.

~~SECRET~~

UNCLASSIFIED

~~SECRET~~

~~SECRET~~

UNCLASSIFIED



UNCLASSIFIED

~~SECRET - EYES ONLY - SHINGLE~~

HEADQUARTERS  
XII AIR SUPPORT COMMAND  
APO 374 US ARMY

SECRET

By Authority of: *SM*  
C.G., XII A.S.C.  
Date: 16 January 1944

S.S.I. NO. 1

ITEM NO. 6

USE OF SCR-509's  
Effective 0001A "D" Day

The SCR-509 is a portable, battery operated, F.M. transmitter-receiver. The sets are crystal-controlled and can operate on channels 14 and 56. They will be used for liaison and emergency communications between Ops #2; the fighter director ship, HMS ULSTER QUEEN; and the USS BISCAYNE.

Call signs as follows:

Ops #2	-	GRUBSTAKE
ULSTER QUEEN	-	EARTHWORK
BISCAYNE	-	SPEEDBALL

After "H" hour, each station will contact the other two stations on channel 14 every hour on the hour. If by 10 minutes past the hour no contact has been made, they will change to channel 56 and attempt to make contact on this channel until 20 minutes past the hour. This hourly schedule will be maintained for the first 24 hours. The schedule thereafter will be set by "SPEEDBALL".

By Command of Major General HOUSE;

T. C. DARCY,  
Colonel, G.S.C.,  
Chief of Staff.

OFFICIAL:

*Stephen B. Mack*  
STEPHEN B. MACK,  
Lt. Col., A. C.,  
A/C of S., A-3.

~~SECRET~~

UNCLASSIFIED

UNCLASSIFIED

~~SECRET~~

HEADQUARTERS  
XII AIR SUPPORT COMMAND  
APO 374 US ARMY

SECRET

By Authority of: *YH*  
C.G., XII A.S.C.  
Date: 15 January 1944

S.S.I. NO. 1

ITEM NO. 7

SUNRISE, SUNSET TABLES  
Effective 0001A, 15 January 1944

1. This table is based upon NAPLES, Italy, and all times mentioned are "A" time.

2. To correct for the city of ROME, Italy, the approximate correction factor to be applied to this table is plus eight (8) minutes.

DATE	SUNRISE	SUNSET	MOONRISE	MOONSET	PHASE
Jan. 15, 1944	0731	1656	2151	1020	
16	0730	1657	2250	1047	
17	0730	1658	2349	1113	
18	0730	1659	-----	1140	Last Quarter
19	0729	1700	0005	1209	
20	0729	1702	0152	1241	
21	0728	1703	0257	1318	
22	0727	1704	0405	1402	
23	0726	1706	0511	1456	
24	0726	1707	0614	1558	
25	0725	1708	0712	1707	New Moon
26	0724	1710	0802	1823	
27	0723	1711	0846	1938	
28	0722	1712	0924	2053	
29	0722	1713	0958	2206	
30	0721	1714	1031	2315	
31	0720	1716	1101	-----	
Feb. 1, 1944	0719	1717	1136	0023	1st Quarter
2	0718	1719	1208	0129	
3	0716	1720	1245	0232	
4	0715	1721	1326	0333	
5	0714	1722	1411	0428	
6	0713	1724	1502	0520	
7	0712	1725	1556	0606	
8	0711	1726	1651	0646	
9	0710	1727	1748	0722	Full Moon
10	0709	1729	1846	0754	
11	0708	1730	1944	0823	
12	0706	1731	2042	0850	
13	0705	1732	2140	0916	
14	0706	1734	2238	0943	
15	0702	1735	2341	1010	
16	0701	1736	-----	1040	
17	0659	1738	0043	1115	Last Quarter
18	0658	1739	0147	1154	
19	0657	1740	0252	1240	
20	0655	1741	0354	1338	
21	0654	1743	0454	1440	
22	0652	1744	0547	1552	

~~SECRET~~

UNCLASSIFIED

UNCLASSIFIED

DATE	SUNRISE	SUNSET	MOONRISE	MOONSET	PHASE
Feb. 23, 1944	0651	1745	0633	1708	
24	0649	1747	0716	1825	New Moon
25	0647	1748	0752	1941	
26	0646	1749	0826	2055	
27	0644	1750	0859	2207	
28	0643	1751	0933	2316	
29	0641	1752	1006	----	
March 1, 1944	0640	1754	1044	0022	
2	0639	1755	1124	0125	
3	0637	1756	1209	0224	
4	0636	1757	1257	0317	
5	0634	1758	1349	0405	
6	0632	1800	1445	0447	
7	0630	1801	1542	0526	
8	0628	1802	1639	0557	
9	0627	1803	1738	0627	
10	0625	1804	1836	0654	Full Moon
11	0624	1805	1934	0720	
12	0622	1807	2034	0746	
13	0620	1808	2134	0813	
14	0618	1809	2236	0842	
15	0616	1810	2338	0914	
16	0615	1811	----	0950	
17	0613	1812	0042	1034	Last Quarter
18	0612	1814	0143	1124	
19	0610	1815	0242	1222	
20	0608	1816	0336	1328	
21	0607	1817	0424	1441	
22	0605	1818	0506	1555	
23	0603	1819	0545	1712	
24	0602	1820	0620	1828	New Moon
25	0600	1821	0654	1942	
26	0558	1823	0725	2055	
27	0556	1824	0802	2205	
28	0554	1825	0839	2312	
29	0553	1826	0918	----	
30	0551	1827	1002	0015	
31	0549	1828	1051	0111	1st Quarter

By Command of Major General HOUSE:

T. C. DARCY,  
Colonel, G.S.C.,  
Chief of Staff.

OFFICIAL:

*Stephen B Mack*

STEPHEN B. MACK,  
Lt. Col., A. C.,  
A/C of S., A-3.

~~SECRET~~

UNCLASSIFIED

~~SECRET~~  
HEADQUARTERS  
XII AIR SUPPORT COMMAND  
APO 374

~~SECRET~~ ~~CHINOLE~~  
:By Authority of:  
:C.G., XII ASC :  
:Initials YSL :  
:15 January 1944:

S.S.I. No. 1  
Item No. 8

Radio Aids to Navigation

Effective Date of Issue  
(except as noted)

	FREQUENCY		CALL SIGN	POSITION	REMARKS
	TRANSMIT	RECEIVE			
<u>Fighter Director Ship (HMS ULSTER QUEEN)</u>					
VHF Control	102.78 mc.	102.78 mc.	EARTHWORM		Continuous
	114.3 mc	114.3 mc	"		Dawn to Dusk
	115.56	115.56	"		Dawn to Dusk
	116.1	116.1	"		Dawn to Dusk
(NOTE: EARTHWORM commences operation at "H" hour on "D" day)					

ITALY

Sector Operations No. 1 at Frattamaggiore (N-2360)  
(64th Ftr. Wg. (XII ASC))

VHF Control	102.78	102.78	CHANGER		Dawn to Dusk
	114.3	114.3	"		Dawn to Dusk
	115.56	115.56	"		Dawn to Dusk
	116.1	116.1	"		Continuous
VHF Fixer	102.78	102.78	CLUMSY		Day Only
	114.3	114.3	CRABTREE		Day Only
	116.1	116.1	DOUGLAS		Night Only
A.S.R. Fixer	117.9	117.9	CONVENT	(N-1852)	Continuous
VHF Homer	116.1	116.1	LUCKY	(N-3163)	Continuous
	117.9	117.9	LUCKY		Continuous
HF Forward Bomber Control	4465	4465	CHANGER		Dawn to Dusk

OPS #2 Nettuno Area  
(64th Ftr. Wg. (XII ASC))

VHF Control	102.78	102.78	GRUBSTAKE		Continuous
	114.3	114.3	GRUBSTAKE		Dawn to Dusk
	115.56	115.56	GRUBSTAKE		Dawn to Dusk
	116.1	116.1	GRUBSTAKE		Dawn to Dusk

(NOTE: GRUBSTAKE commences operations as soon as possible after H hour on "D" day.)

Naples Fighter Sector (MACAF)

VHF Control	112.86	112.86	CHAPRONE		Continuous
	116.1	116.1	CHAPRONE		Continuous
	117.9	117.9	CHAPRONE		Continuous

UNCLASSIFIED

~~UNCLASSIFIED~~

	FREQUENCY		CALL SIGN	POSITION	REMARKS
	TRANSMIT	RECEIVE			
VHF Fixer	112.86	112.86	ICEBLOCK		Day Only
	116.1	116.1	ICEBLOCK		Night Only
A.S.R. Fixer	117.9	117.9	ICEBLOCK		Night Only
VHF Homer	116.1	116.1	ICEBLOCK	40°36'N	Day Only XII TC
	117.9	117.9	ICEBLOCK	14°54'E	Night Only
Naples (Lake Patria)					
HF D/F	4540	4540	30F	40°53'N 14°03'E	Continuous

Montecorvino A/D 40°37' N, 14°54'50"E (MACAF)

HF A/D Control	2410	2410	SONIA		Continuous
VHF Control	116.1	116.1	SONIA		On request to HEADPHONE on 116.1
VHF Homer	116.1	116.1	BRACKEN		On request to HEADPHONE on 116.1
MF Beacon	455		"R"	40°35'00"N 14°44'00"E	On request to 74K on 6666/ 3925 Kc
HF A/D Control	6440	6440	"GI"	40°37'N 14°55'E	Dawn to Dusk

Cercola Airdrome (N-2953)

VHF A/D Control	116.1	116.1	TEXAS		Continuous
VHF Homer	116.1	116.1	TEXAS		Continuous
HF A/D Control	6440	6440	TEXAS		Continuous

Vesuvius Airdrome (N-125514)

VHF A/D Control	116.1	116.1	GLENDALE		Continuous
VHF Homer	116.1	116.1	WILLOWDALE		Continuous
HF A/C Control	6440	6440	GLENDALE		Continuous
HF R/T Bomber Control	4465	4465	BURMA		Dawn to Dusk

Pomigliano Airdrome (N-3360)

HF A/D Control	6440	6440	GREMLIN		Dawn to Dusk
VHF A/D Control	116.1	116.1	RUNNER		On request to Naples Fighter Sector CHAPRONE on 116.1 mc.
VHF Homer	116.1	116.1	ICEBLOCK		On request to Naples Fighter Sector CHAPRONE on 116.1 mc.

UNCLASSIFIED

UNCLASSIFIED

	FREQUENCY		CALL SIGN	POSITION	REMARKS
	TRANSMIT	RECEIVE			
HF D/F	4575	4575	PX8	40°55'10"N 14°25'20"E	Day Only
	3105	3105	PX8	40°55'10"N 14°25'20"E	Night Only
MF Beacon	421		75Z	40°55'05"N 14°25'40"E	On request to PX8. During bad weather first five minutes of each hour.

CORSICAAjaccio A/D (41°55'20"N, 08°45'45"E)

VHF Control	110.34	110.34	FOODSHOP		Continuous
	116.1	116.1	FOODSHOP		Continuous
VHF D/F	116.1	116.1	GOOSEGOG		Continuous
MF D/F	6517	333 kc.	FNJ	41°55'45"N 08°44'50"E	0500-1900 GMT
Fixers at Car- gese and Sartene	117.9	117.9	GOOSEGOG		Continuous

Borgo Fighter Sector

VHF Control	112.86	112.86	BLACKTOP		Continuous
	110.34	110.34	BLACKTOP		Continuous
	116.1	116.1	BLACKTOP		Continuous
VHF Homer	110.34	110.34	BRICKPATH		Continuous
	116.1	116.1	BRICKPATH		Continuous
Homer Fixer	110.34	110.34	BRICKPATH		On request to BLACKTOP. Also maintains continuous watch on 117.9 mc for A.S.R. fixing in conjunction with fixer on Cape Corse.
	112.86	112.86	BRICKPATH		
	116.1	116.1	BRICKPATH		
A.S.R. Fixer	117.9	117.9	BRICKPATH		

Ghisonaccia

VHF Fixer and Homer	116.1	116.1	HOUSEMAID		Day Only
MF Beacon	236 kc		"D"	40°02'55"N 09°23'27"E	Operates continuous at night first fifteen minutes each day hour.
Homer Fixer	110.34	110.34	HOUSEMAID		Available on request to BLACKTOP AND Also maintains continuous watch on 117.9 mc. for A.S.R. fixing in conjunction with fixer on Cape Corse
	112.86	112.86	HOUSEMAID		
	116.1	116.1	HOUSEMAID		
A.S.R. Fixer	117.9	117.9	HOUSEMAID		

UNCLASSIFIED

UNCLASSIFIED

DISTRIBUTION LIST

COPY NOS.

C.G., 64th Fighter Wing	1-15
A.O.C., M.A.T.A.F.	16-20
C.G., M.A.A.F.	21-25
C.G., Fifteenth Air Force	26-28
A.O.C., M.A.C.A.F.	29-30
C.G., 62nd Fighter Wing	31-35
C.G., Fifth Army	36-86
A.O.C., Desert Air Force	87-89
A.O.C., XII Bomber Command	90-91
Controller, HMS ULSTER QUEEN	92-96
Controller, HMS PALOMARES	97-99
O.C., Naval Task Force (Through N.L.O.)	100-103
<del>C.G., Twelfth Air Force</del>	<del>104-107</del>
C.G., Twelfth Air Force	108-111
C.G., XII Troop Carrier Command	112-113
C.O., 31st Fighter Group	114-115
C.O., 33rd Fighter Group	116-117
C.O., 27th Ftr-Bomb. Group	118-119
C.O., 86th Ftr-Bomb. Group	120-121
C.O., 324th Ftr-Bomb. Group	122-123
C.O., 111th Recon. Squadron	124-125
O.C., 225 Squadron (RAF)	126-127
O.C., 600 Squadron (RAF)	128-129
C.O., 415th Night-Fighter Squadron	130-131
O.C., 23 Squadron (RAF)	132-133
O.C., 255 Night-Fighter Sqdn. (RAF)	134-135
C.O., 79th Fighter Group	136-137
O.C., 244 Fighter Wing (RAF)	138-139
C.O., 47th Bomb. Group	140-141
File, spares	142-171

UNCLASSIFIED

(Detach along this line)

DOCUMENT RECEIPT

Sign in space provided and mail to:

HEADQUARTERS (ADV.) XII AIR SUPPORT COMMAND, Attn: A-5, APO 374

Receipt is hereby acknowledged of S.S.I. No.1, copies no: 80.

FROM: \_\_\_\_\_

NAME: \_\_\_\_\_ RANK: \_\_\_\_\_

DATE REC'D: \_\_\_\_\_